

NUF Bulletin



Scandinavian Association of Urology

1/2014



URETHROPLASTY

Scandinavian
study

URINARY INCONTINENCE

A report from two articles
in a ongoing PhD-project

UROLOGY

A two-way
Reciprocal Contribution



PHOTOS

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Page 4 and 5: www.stockvault.net

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www.nuf.nu

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ÅkessonBerg
Emmaboda, Sweden

ISSN: 0284-3382 (Print)
ISSN: 2001-8029 (Online)

NUF-Bulletinen is published two times per year.
Next number is in December 2014. It is distributed to every member of the Scandinavian Association of Urology in Denmark, Finland, Iceland, Norway and Sweden.



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NUF Bulletin
wishes you a great summer!





Editors' Corner

Marianna Hrebenyuk and Anders Lidestål

Dear friends!

All previous editors know how much effort is required to collect material to *Bulletinen* to provide readers with interesting articles. We understand it is not easy to take time off from busy schedules to write articles to *Bulletinen* and we are very grateful to all colleagues that manage to do that.

In the current issue Dr Brehmer informs you on how to get your clinic certified as a specialist training centre according to the high standards of EBU. To date, only three nordic centres are certified (Örebro, Kristiansand+Arendal and Oulu), all in basic training. More nordic centers should be encouraged to have their programmes evaluated too, in order to apply for certification.

You will also find the story behind the founding of the Collaboration Group on Reconstructive Urology, articles about incontinence after radical prostatectomy, hypospadias surgery, SPCG-corner and more.

Have a nice reading.

Sincerely,
ANDERS AND MARIANNA



Foto: Annika Cederlund



President's Corner

Kimmo Taari

Dear colleagues!

The spring came early to Scandinavia and it is time to start the summer activities. Usually May is extremely busy because everybody wants to make the late projects ready before summer.

Our collaborating groups have been active in preparing some forthcoming courses: There will be the 15th course in laparoscopic urology in Aarhus on 3–5 September, 2014, and the main topic will be complications. The collaboration group for urinary stones has prepared a course of ureteroscopy in Örebro on 24–26 September. There will also be the 3rd Nordic course on radical cystectomy and urinary tract reconstruction on 6–7 November in Copenhagen. I

know these courses will have a very high scientific and practical level and I hope that young colleagues will attend them.

One of the main functions of our association is to support and activate the collaboration working groups. The national societies will nominate the members for the groups and the association will give some financial support.

We want your continuous help in updating the home pages (www.nuf.nu). The member lists of the collaborating groups and the links to the groups are partly outdated. I hope that the chairperson or secretary of each group will contact our

webmaster Jørgen Bjerggaard (jb@skejby.net) and update the information. Congratulations to the Scandinavian NephroUrolithiasis Group (SNUG) for the new pages (<http://www.stonecourse.org>). They are very attractive and informative.

And do not forget our travel grant (<http://www.nuf.nu/travelgrant.htm>). As is stated on the home page: "This is a once in a life-time opportunity to learn something new and at the same time make social contacts with other Nordic colleges."

The next NUF Congress will be in June 2015, in Malmö, Sweden.

With best wishes to all Scandinavian urologists and all friends of NUF. ■

EBU certifications, what are they and why do we need them

Marianne Brehmer represented Sweden in the EBU for 12 years, 2002-2013. During seven years she was a member of the EBU executive, as incoming, present and past president and also as chairman of the UTPC.

Europe is a common market for doctors and patients. To move across borders to work in different European countries is since many years just a matter of paperwork. Since the cross border health care directive was adopted by the European Commission (EC), 2011, patients may go across borders within Europe to get health care and get reimbursed by the national health care system in their home countries.

There is a need for harmonisation, transparency and quality control of training as well as of treatment and care. Clear criteria have to be identified and the process must be dynamic with regular updates, in close collaboration with the EC.

All medical specialties including urology evolve rapidly and are getting more and more technically demanding. Doctors tend to sub-specialise to a higher extent. However, not all centres have the capacity and knowledge to provide the highly specialised training required.

European Board of Urology, EBU, is a regulatory body, under the umbrella of the European Union of Medical Specialists, UEMS. The body is a non-profitable and democratic organisation consisting of 31 membership countries. Each membership country has the right to have two representatives, representing their national societies.

The main objectives of the EBU are to work for a harmonisation and a high level of urological training, on basic as well as on postgraduate level in Europe. There are two certification systems in the EBU, Residency Training Programme in Urology (RTPU) certification and Sub-specialty centre certification. To achieve its goals, the EBU:

- publishes and maintains a European Curriculum for urological training
- identifies criteria for certification of training centres on basis level
- is offering annual assessment of trainees in urology

- identifies criteria for certification of sub-specialty centres
- accredits activities for the EU-ACME programme

The EBU has been in the frontline regarding certifying residency training centres as well as for identifying criteria for certification of sub-specialty centres.

In 1993, the first Residency Training Programmes in Urology were EBU certified. There are currently 67 certified centres in Europe of which two are in Scandinavia. The certified centres in Scandinavia are Sørlandet Sykehus Kristiansand /Arendal Norway and Örebro University Hospital Sweden.

The EBU certification of sub-specialty centres was first introduced in 2011. Since then five centres have received the nomination EBU-Certified Sub-specialty Centre. None of the certified sub-specialty centres are Nordic.

Certification of Residency Training Programmes in Urology (RTPU)

The RTPU certification is a certification of a training programme on the basis level of urology training, i.e. residence level. The aim of the certification programme is to harmonise and set standards for the training of urologists in Europe. The certification programme gives national training centres a unique opportunity to have their programmes evaluated and assessed against European standards.

To come into consideration for certification some basic criteria have to be met:

- the duration of the training programme is a minimum of five years
- the training programme must meet national standards as defined by national official organisations

The institution is evaluated regarding four main areas:

- Institutional organisation
- Educational programme
- Facilities and resources
- Faculty

An application, describing the institutional organisation, including clinical activity and volume, principles for training, composition of staff members and number of residents at different levels of training, is evaluated by the EBU working committee. If the applicant fulfils the criteria a site visit is performed. Two delegates from two different countries (never from the same country as the applying institute) visit the centre for a whole day. The site visitors meet up early at the morning meeting and meet the staff members, they inspect all facilities and then interview the programme director, the head of the department and at least three residents at different levels of their training. The residents are always interviewed individually.

The individual interviews with the residents have proved to be a highly important part of the certification procedure. It is very often that these interviews put all the other information received into place.

The institution is scored according to a strict protocol, with regard to:

- Educational programme (structured written programme, good rotation within the institute, adequate time period in different positions, etc.)
- Supervising staff (adequate number of staff members with adequate expertise, ratio staff members: residents, etc.)
- Facilities (adequate number of beds, adequate facilities in ward, ambulatory and operating theatre, etc.)
- How the programme is operated in regards to achievements of goals (log books, regular evaluations, personal training programmes, etc.)
- Educational climate (training is taken seriously in the department, staff mem-

■ EBU certifications ...

bers are at hand and happy to supervise, good feedback, etc.)

- Clinical and theoretical training (adequate supervision, step-by-step education, regular internal educational activities, etc.)

The maximum score is 18 and reflects a very high standard. Score 12 or more is granted by a certification for five years whereas score below 12 entitles for a certification for three years. The reason for the latter is that a score below 12 indicates that there are things that need to be improved and it is beneficial for the residents that such alterations are performed within a shorter period than 5 years.

It should be emphasized that the certification process should always be performed in a positive and encouraging way. The site visitors are visiting to, with fresh eyes, see what is already good or what could be improved. After the site visit a written report is put together and the head of the institution gets the report with comments and recommendations. If something may be altered, a suggestion on how that can be done is given.

Residents at an EBU certified centre have a reduced price for the EBU written examination.

EBU Certification of sub-specialty centres

An EBU certified sub-specialty centre is a high-volume centre, which practices a multidisciplinary approach to the treatment of one of the listed urological sub-specialty disorders. Moreover, an EBU certified sub-specialty centre is ready to share of its knowledge in a number of ways, including fellowship programmes and or short-term visits. The applicant can rely on the EBU quality mark.

When the EBU certification of sub-specialty centres was first launched in 2011 it was designed more or less in the same way as the RTPU-certification.

However, it was soon clear that the information needed to evaluate a sub-specialty centre, such as diagnostic and treatment options and volumes, results and publications, could better be given in writing.

It was also obvious that some potential candidate centres were reluctant to apply due to uncertainty of the competence of the evaluators.

THE CRITERIA THAT MUST BE MET

1. General criteria

- The centre is disorder-oriented and works in line with the EAU guidelines.
- If more than one treatment modality is relevant for a certain disorder, in each individual case, the most relevant methods are available.
- The organisation consists of all relevant disciplines needed to guarantee a multidisciplinary approach.

2. Institutional organisation

- The centre has a working relationship with a university.
- The unit has a clear infrastructure including all necessary clinical specialists and a well established teamwork. There are at least two consultants who are experts, and a dedicated staff members in the sub-specialty.
- All relevant treatment modalities within the sub-specialty are available.
- The centre has an adequate number of cases to maintain a high level of results and to pursue research and clinical studies on the specific topic. Moreover, the centre provides care to an adequate number and variety of patients for it to offer a comprehensive and practical training in the given sub-specialty.
- The centre has a well-structured patient's pathway.
- The centre has a quality management system and keeps disease register documentation of performance.
- The centre is part of a national and international collaboration network.
- The centre is research-driven and has an operating budget.

3. Facilities and resources

- The centre is equipped with all adequate technical equipment and has updated routines that enables it to be thoroughly capable in offering relevant developments in the sub-specialty. Moreover, the centre has ready access to supporting specialties and other resources needed to run its operations in a modern and professional manner.
- If there are several relevant treatment modalities for a certain kind of disease or diagnose, all these modalities are available at the centre. The centre has good knowledge of all relevant treatment modalities and a functioning collaboration with specialists within the same hospital/institute where these needed modalities are available, for example interventional radiologists or oncologists.
- The organisation provides professional support for scientific work, such as library facilities including internet access to medical journals, medical statistics and, if relevant, laboratory facilities.

4. Performance

- Results achieved by the centre are on par with other international high-volume institutions.
- The centre presents a high level of treatment results, in all different relevant treatment modalities.
- The centre keeps record of treatment results, including success rates, failures and complications (in line with the EBU application form).
- The centre has a good system for follow-up and an established mechanism for learning from all experience.

5. Research and clinical studies

- The centre stays updated on national and international research carried out within the sub-specialty. Not only does the centre take a dynamic role in the international debate regarding the sub-specialty, it also performs its own research / studies.
- The centre is a trial centre and, if relevant, the centre has permission for bio-banking.
- The centre has adequate research funding.

6. Sharing of knowledge, teaching and training

- The centre is ready to share its knowledge and expertise.
- The centre publishes and presents its own results.
- The centre is involved in national and international meetings and courses.
- The centre has resources and a strategic plan to offer post-graduate teaching, a fellowship programme and/or short-term visits of a special proficiency, which cannot be attained at a standard urological department.
- A short-term visit is 4-12 weeks, a fellowship programme is 6-24 months.
- If a fellowship programme or short-term visit includes surgical training or development of other types of manual skills, it offers an adequate hands-on training. When needed, the host centre also extends assistance to the applicant in obtaining the certificates required to perform hands-on training. For a fellowship or short-term visit that also includes practical training of operative skills, no more than one fellow or short-term visitor per supervising consultant should be accepted at the same time.
- If the centre trains urology residents, there is no more than one resident and one fellow or short-term visitor for every supervising consultant. It should be noted that hands-on training on operative skills is not mandatory for a fellowship programme or short-term visit. However, it must be clear to the applicant if that is the case or not.
- The fellowship or short-term visit programme is described according to the EBU template.

Figure 1. Criteria that must be met by a sub-specialty centre

■ EBU certifications ...

1.	Treatment modality (as primary treatment)	Number of cases (please fill in the number of cases for all treatment modalities, also for those with N/A indicated in other columns)	Freedom from biochemical progression, pad-free continence, good erectile function (if appropriate), freedom from radiation induced cystitis and proctitis, at 1 year after completed treatment	Need of 2:nd line treatment with curative intent, at 3 years after completed treatment (*)	Need of palliative therapy after failure of treatment with curative intent, at 5 years after completed treatment (**)
a)	Radical prostatectomy, open	<input type="text"/>	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %
b)	Radical prostatectomy, robot assisted laparoscopic	<input type="text"/>	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %
c)	Radical prostatectomy, conventional laparoscopic	<input type="text"/>	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %
d)	Transperineal brachy therapy	<input type="text"/>	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %
e)	Radiation therapy, curative external	<input type="text"/>	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %
f)	Radiation therapy, curative external, combined with hormonal therapy	<input type="text"/>	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %
g)	Salvage or adjuvant radiotherapy	<input type="text"/>	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %
h)	Salvage radical prostatectomy	<input type="text"/>	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %
i)	Palliative TURP	<input type="text"/>	N/A (not applicable)	N/A	N/A
j)	Hormonal therapy, surgical	<input type="text"/>	N/A	N/A	N/A
k)	Hormonal therapy, drug	<input type="text"/>	N/A	N/A	N/A
l)	Radiation therapy, palliative	<input type="text"/>	N/A	N/A	N/A
m)	Other medical treatment, advanced disease	<input type="text"/>	N/A	N/A	N/A
n)	Active surveillance / monitoring	<input type="text"/>	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %
o)	Watchful waiting	<input type="text"/>	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %	<input type="text"/> = <input type="text"/> %

(*) Number of patients with a need of second line treatment with curative intent, on whom primary treatment was carried out 3-1 years before the starting point of the 2-year data collection period.

(**) Number of patients with a need of palliative therapy, on whom primary treatment was carried out 5-3 years before the starting point of the 2-year data collection period.

Figure 2. Endpoints for results for different treatments for prostate cancer

Based on these facts the system was completely altered and re-launched in December 2013. In the current system both evaluators (peer-reviewers) and applying centres are evaluated according to objective standardized rules and the whole system is on-line.

To guarantee the high standard of peer-reviewers the national societies, of all membership countries, were asked to nominate up to five candidates in each sub-specialty. The nominated candidates were asked to submit their CV, according to a template including information about clinical, academic and pedagogic qualifications within the sub-specialty. The EBU has received almost a hundred CV:s that have been evaluated by a certain task-force within the EBU.

Following the classification by the EAU guidelines, at the time, the sub-specialties has been divided into ten fields of urologi-

cal disorders:

- BPH
- Renal cancer
- Penile cancer
- Neuro-urology
- Prostate cancer
- Testicular cancer
- Urothelial cancer
- Stones in the upper urinary tract
- Female urology and incontinence
- Renal failure with renal transplantation

A centre applying for EBU sub-specialty certification must meet a number of criteria identified by the EBU, (fig. 1 - page 8). It should be mentioned that in 2012 the EBU participated in a discussion with the EC, to identify criteria for the EC European Reference Centres for complicated and unusual disorders. Several of the criteria already set up by the EBU for sub-specialty certification were then adopted by the EC.

The on-line applications require information according to the mentioned criteria. The headlines are the same for all sub-specialties whereas the detailed information is adjusted to match the specific sub-specialty. A centre needs to be disorder oriented and be able to offer all different investigation and treatment modalities that are relevant. However, no specific numbers of diagnostic or treatment procedures are given. It is a task for the peer-reviewers to assess if the numbers given are relevant to be able to keep a high standard, develop and educate within a certain field.

The system makes the applications standardised in the sense that all centres within the same subspecialty have to provide the same kind of information: for example, endpoints for results for different treatment options as well as for complications are stated (fig. 2 - this page). For all different treatment modalities, the centre has to submit the results and the complications over a period of the last two years.

Furthermore, the evaluation by the peer-reviewers is objective. The reviewers have to, for each part of the application, evaluate if the centre meets the given criteria to a high, medium and low grade (fig. 3 - page 10). They also have to give a summary and motivation of their evaluation.

The fact that each application is evaluated by four peer-reviewers from four different countries adds to the objectivity.

The centres need to share of their knowledge by publishing, participation in meetings and courses and by offering short-term visits and/or fellowship programmes. A fellowship programme is of a minimum of six months. A description of the programme, according to a template, is required so that the target group, the aim, how the programme will be carried out, etc, is clear to the applicant. Having completed a short-visit or a fellowship programme in a certified centre is endorsed by one credit per week with a maximum of 50 credits (EU-ACME category 2).

The evaluation process for certification takes approximately four weeks.

The EBU is well aware of the fact that many centres do not have databases over their results and complications. Therefore, there is a possibility to get a provisional certification. The provisional certification is available to those applicants who are ready to submit an application but require more time to collect the required treat-

■ EBU certifications ...

D2 - RESULTS LAST 2 YEARS

Please indicate to what extent the centre meets the following criteria

Results achieved by the centre should be on par with other international high-volume institutions. The centre should present a high level of results, in all different relevant treatment modalities.

Note: Take comments in D4 into consideration when evaluating the results. Some centres may treat more complicated cases, which may have an influence on the outcome.

- The centre meets the criteria to a high extent
- The centre meets the criteria to a medium extent
- The centre meets the criteria to a low extent

Save evaluation and continue editing Exit Top of page Peer-reviewer final conclusion

Note: The data to be presented in the table below shall refer to the two-year data collection period you have chosen in form field A1: Choose...

1.	Treatment modality (as primary treatment)	Number of cases (please fill in the number of cases for all treatment modalities, also for those with N/A indicated in other columns)	Freedom from biochemical progression, psd-free continence, good erectile function (if appropriate), freedom from radiation induced cystitis and proctitis, at 1 year after completed treatment	Need of 2nd line treatment with curative intent, at 3 years after completed treatment (*)	Need of palliative therapy after failure of treatment with curative intent, at 5 years after completed treatment (**)
a)	Radical prostatectomy, open	<input type="text"/>	<input type="text"/> = NaN %	<input type="text"/> = NaN %	<input type="text"/> = NaN %
b)	Radical prostatectomy, robot assisted laparoscopic	<input type="text"/>	<input type="text"/> = NaN %	<input type="text"/> = NaN %	<input type="text"/> = NaN %
c)	Radical prostatectomy, conventional laparoscopic	<input type="text"/>	<input type="text"/> = NaN %	<input type="text"/> = NaN %	<input type="text"/> = NaN %
d)	Transperineal brachy therapy	<input type="text"/>	<input type="text"/> = NaN %	<input type="text"/> = NaN %	<input type="text"/> = NaN %

Figure 3. How the results, for the last 2 years, are presented for the peer-reviewers. Here is shown results of some treatments for prostate cancer. In the green field the criteria are cited and the peer-reviewer mark to what extent the centre meets the criteria.

ment statistics. In these cases the applicant submits an application without statistics about treatment results and complication results. Provided that the application otherwise meets the certification criteria a temporary certification status valid for two years is granted. Three months before the provisional certification expires the applicant receives a notification of expiration so that the applicant may provide the needed information to the EBU. The application is again reviewed by peer-reviewers and provided the certification criteria are met, certification for three further years is granted.

Conclusion

The EBU certification systems contribute to transparency and quality control, elements important for trainees and specialists in urology looking for good training centres but also elements of rising importance to meet the demands of an increasing number of patients getting aware of the EC cross

border health care directive.

Scandinavian centres may use the EBU systems to harmonise and to match their standard to other centres in Europe.

Don't forget to visit www.ebu.com ■



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The SPCG's Corner

Dear all!

After a long winter, we have now experienced summer already in Southern Sweden. In June 2015, just over 1 year from now, we will welcome all of you to Malmö and the 30th NUF congress. We then look forward to the SPCG symposium, updating you on the clinical research performed by the network of Urologists, Uro-Oncologists and nurses in Scandinavia. Furthermore, we will have some hot topic presentations within the field of prostate cancer.

SPCG 15

Congratulations to Olof and his team in the study board, SPCG 15 has been approved in the ethics committee recently. This will definitely be another landmark study. Just to refresh your memory the flow chart looks like this (*picture to the right*);

As you can see, we needed 1.200 patients to succeed. This means that we all have to be dedicated to include patients. Recently at ASCO-GU, a SPCG 7 update was presented showing an absolute survival benefit of 18% with Radiotherapy compared to hormonal treatment alone. The majority of patients in this study had locally advanced disease (T₃), so it is an open question if surgery can improve outcome for these patients.

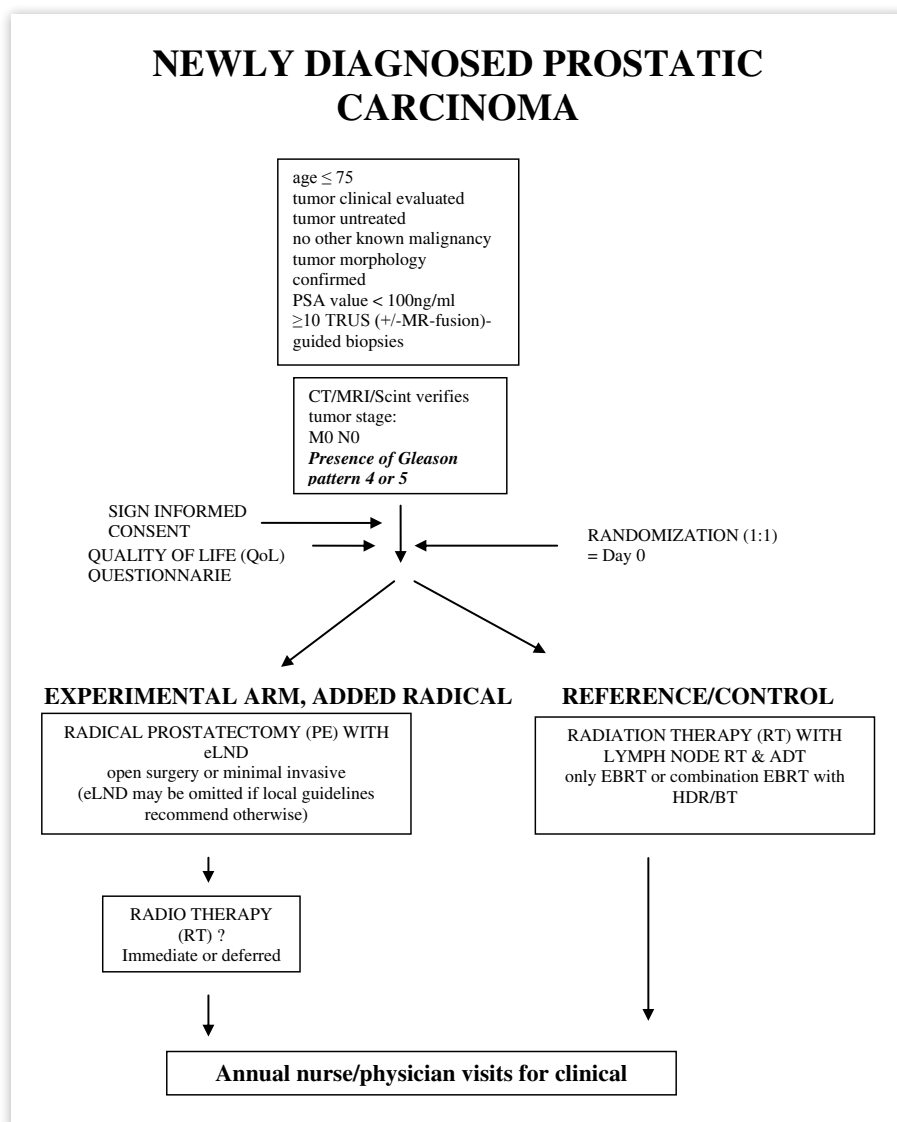
A SPCG Trial meeting will serve as a start meeting for SPCG 15 taking place in Malmö the 9-10 October.

European collaboration

SPCG have recently had a meeting with ISSECAM, a European collaboration group of Urologists and Oncologist with profile on locally advanced prostate cancer. Many well known colleagues in Europe are members in this group and we can hope there will be a fruitful collaboration between SPCG and ISSECAM.

SPCG Research Grant

The grant for 2013 was awarded Helena Bertilsson, Dept of Urology in Trondheim Norway and her project PET-MR in high risk prostate cancer. The grant is SEK 50 000. Congratulations to Helena. I want to remind



The flow chart of Olof and his team.

you all that the deadline for applications to the 4th Research Grant is 30th November 2014. See page 30 for more information.

SPCG 16

We have ideas about our next study. One idea is to test one of the new hormonal treatments early in castrate resistant prostate cancer. Another proposal is on active surveillance. Both are hot topics and we aim to have a proposal soon.

In the meantime, I wish you all a very nice summer vacation and look forward to another interesting year for SPCG! ■



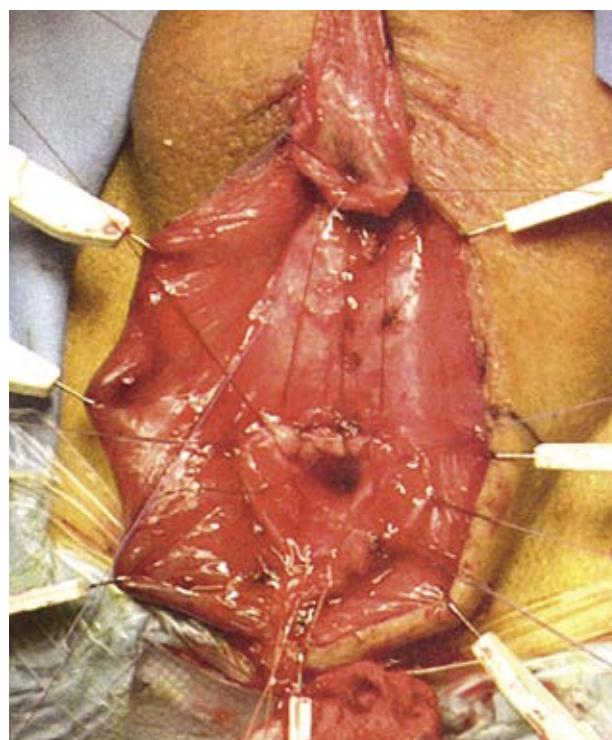
GÖRAN AHLGREN
SPCG Chairman

Scandinavian urethroplasty study

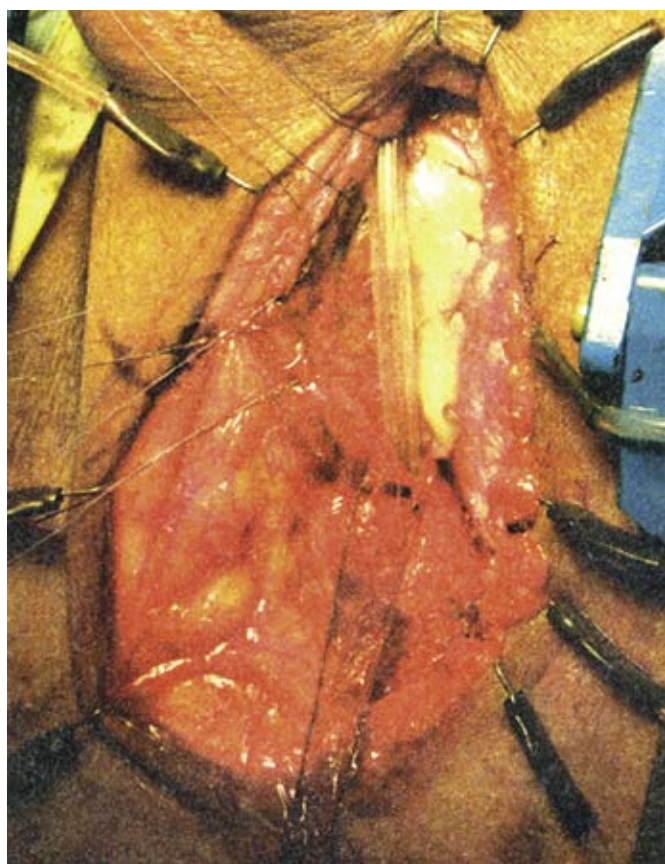
The Collaboration group on reconstructive urology has initiated several studies during its years of existence. This study is another example of multicenter studies initiated through the group.

One of the controversies in reconstructive urethral surgery is what operative technique to choose for short bulbar strictures. Some choose a resection of the stricture and end-to-end anastomosis while others prefer an incision through the stricture and a grafting procedure with buccal mucosa or skin. Traditionally the end-to-end anastomosis has been considered the best option due to the lower recurrence rates compared to the grafting procedure. However – no studies have compared these techniques in a randomized study. In a study of 153 patients who had a resection and anastomosis, Dr Barbagli reported a rather high incidence of penile complications after this procedure (1). One patient (1.6 %) experienced a cold glans during erection, seven patients (11.6 %) reported a glans that was neither full nor swollen during erection and 11 patients (18.3 %) had decreased glans sensitivity. It could be speculated that this is due to the division of the corpus spongiosum, thus reducing the blood supply and innervation of the glans.

This has led to the proposal of a randomized study comparing the two techniques with regard to penile complications and erectile function. The participating centres are Gothenburg, Örebro, Helsinki, Aalborg and Oslo.



End-to-end.



Dorsal buccal mucosa.

The study aims to include 300 patients with bulbar urethral strictures ≤ 2 cm. One group will be operated with resection of the corpus spongiosum and the stricture, followed by an end-to-end anastomosis. In the other group, the stricture will be incised either dorsally or ventrally and augmented with a buccal mucosa graft. Penile skin flap will not be used, as this could confound the penile complications results. After surgery, the patients will be followed for one year. The primary endpoints will be degree of erectile dysfunction, measured by changes in IIEF-5 and penile complications, measured by a patient administered questionnaire.

The Norwegian ethical committee has approved the study, and hopefully approval in the other Nordic countries will be obtained before this summer. We aim to start inclusion by fall 2014. ■



OLE JACOB NILSEN

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References:

1. Barbagli G et al. Long-Term Followup of Bulbar End-to-End Anastomosis: A Retrospective Analysis of 153 Patients in a Single Center Experience. *J Urol* 2007; 178: 2470-2473

The NUF Collaboration Group on Reconstructive Urology

In May 1997, Christopher Woodhouse and Tony Mundy had a course on reconstructive urology in London. Probably one of the first to focus on this field of urology, and an excellent one.

The wide scope of surgical challenges in the field of urinary reconstruction was highlighted and discussed. The course was held in the building belonging to Royal College of Surgeons and close by was the charming old pub "The Georges"

The Scandinavian participants: Wiking Månsson from Lund, August Bakke from Bergen and Alexander Schultz from Oslo soon found their way to the pub, which was an ideal place for serious discussions on reconstructive urology. It was evident for the three of us, that the field of reconstruction would be of growing importance, and that it should be very well suited for a Nordic collaboration on both a clinical and a scientific level.

At the following NUF congress, in Helsinki, the same summer, we proposed the establishment of a collaboration group for reconstructive urology, and it was approved by the general assembly.

The first members, appointed by the respective national urological societies, were:

Klaus Møller Jensen and Kenneth Steven from Denmark, Kari Tuhkanen and Veli-Matti Puolakka from Finland, Eirikur Jonsson from Iceland, August Bakke and Alexander Schultz from Norway, and Olof Jonsson and Wiking Månsson from Sweden.

Wiking, with his usual energy and enthusiasm, was the natural leader of the gang! And he also arranged for the first meeting in



Alexander Schultz, Wiking Månsson and August Bakke, standing outside the old pub "The Georges".



Alexander Schultz, Wiking Månsson and August Bakke are having a good time.

the group at Lyby säteri in Skåne. During a two day meeting, with delicious food and visits to the excellent sauna, the activities of the group were discussed. The experience was such, that a tour in sauna has become an absolute trademark of the group, and the hosts strive to find places with exclusive and special saunas for the meetings.

The group has been pretty active, with two meetings a year for planning of prospective studies, state of the art articles on selected subjects and preparing courses. Courses on a variety of reconstructive subjects has been held in connection with almost all the NUF-congresses since the collaboration group was founded. In addition, the meetings have been valuable arenas for discussions of all aspects of reconstructive procedures, for sharing experience and solving problems.

As is the case with all the collaboration groups, the viability lies with the enthusiasm of the participants, the chemistry within the group and not least with the leader. In the group for reconstructive urology, all these three factors have been present, and I think we have all had our positive experiences meeting and working together in a true Nordic collaboration. ■

ALEXANDER SCHULTZ
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Urological department
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17th Copenhagen Symposium on Endoscopic Urological Surgery

PreCourse
in basic robot
assisted laparo-
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27 January

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The Copenhagen Symposium on Endoscopic Urological Surgery is a recurrent event arranged by the Department of Urology, Herlev University Hospital. CME accreditation is applied for.

The symposium is designed as a comprehensive and practical guide to current endoscopic urological procedures, diagnostic as well as operative. The symposium is tailored to meet the urologist-in-training's demand for learning, discussion and reflection in endo-urology. Emphasis is placed upon demonstrating state of the art procedures ranging from treatment of lower urinary tract obstruction (PVP, TURP, TUIP, transurethral vapourisation, Holmium enucleation, TUMT, stenting, etc.) to optical urethrotomy, various bladder tumour resection techniques, ureteroscopic and percutaneous lithotripsy techniques, diagnostic endoscopy of the upper urinary tract and stenting techniques of the ureter and prostate.

All procedures are video-transmitted live from the operating theatres to the grand auditorium. Live interaction, including quizzes, questions and comments between surgeons and audience will take place. Included state of the art lectures and round table discussions makes this an ideal learning forum.

The precourse in basic robotassisted laparoscopic surgery is reserved a limited number of participants (first come, first served).

Faculty:

The faculty represents a comprehensive number of experts from Scandinavia and the rest of Europe within the fields of endoscopic urological procedures.

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Please visit www.seus2015.com where the detailed programme is published.

Registration fee:

Includes tuition, welcome reception, farewell banquet at The Admiral Hotel, exhibitions, bus transportation between hospital, hotel and reception.

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Early bird:

Before 15 October:

DKK 7,500.-

Before 15 December:

DKK 8,000.-

Late registration between

15 December and 1 January:

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Additional course in basic robot assisted laparoscopic surgery:

DKK 1,500.-

Accommodation (not included in fee):

All participants are given the opportunity to book a room (single or double) at the Admiral Hotel, Toldbodgade 24-28, Copenhagen K. The Hotel is a four star hotel.

Hotel booking is done through our web site at registration.

www.seus2015.com

A two-way Reciprocal Contribution

Hypospadias surgery has become a discipline in itself, hence the term hypospadiology. Originally, pioneered and domineered by general and plastic surgeons, hypospadiology now has shifted to the realm of paediatric urology. This shift occurred gradually during the last two decades and is mainly the result of a more holistic trend in managing these patients especially when considering that hypospadias treatment encompasses much more than just creating a tube, and moving the meatus distally. Other than aiming for good cosmesis modern hypospadias management entails achieving optimal urological functionality, tackling complications, especially with the advent of paediatric endoscopes, and managing associated conditions such as disorders of sexual differentiation, cryptorchidism, and voiding dysfunctions, all of which are integral parts of the urological and paediatric urological specialties.

Being a dynamic condition, hypospadias and its surgery has a tendency to pose continuing challenges with time and increasing patient age. And while most patients are treated in infancy, a significant percentage of them are liable to require further and at times multiple interventions way into adulthood. So, and in the absence of wide scale transitional care these adult patients with sequelae of hypospadias surgery are often left with suboptimal management options, being seen by adult urologists, plastic surgeons or others not dedicated to handling these quite complex conditions. It has been said that in a room with ten hypospadiologists you will find twenty opinions on how to manage a particular case. This saying



Figure 2. Distal hypospadias which shows the bad quality of both skin and urethra in the distal part, requiring a more complicated procedure than preoperatively assessed.

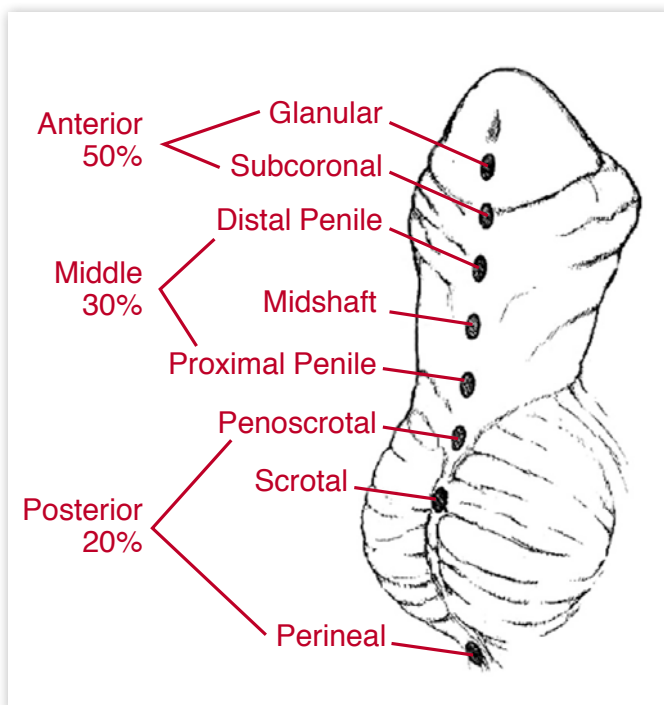


Figure 1. Grading of hypospadias based on the meatal placement.

is witness to the very demanding nature of reconstructive management and experience needed when embarking on management especially in adults requiring complex redo procedures.

Hypospadias is a hypoplasia of the whole ventral aspect of the penis, with a proximally placed meatus, varying degrees of ventral curvature combined with anomalies of the foreskin and the scrotum. In its mildest forms hypospadias can consist of a minor ventral defect of the foreskin with an orthotopic meatus, all the way to a perineally placed meatal opening and severe ventral curvature of over 90 degrees and bilateral cryptorchidism (in essence ambiguous genitalia) and everything in between (Figure 1). Needless to say, surgical intervention is geared towards the severity of the anomaly, and usually entails a simple tabularization of the urethral plate and foreskin reconstruction in simple cases (distal hypospadias) to staged procedures (proximal hypospadias) where the penis is straightened and the resultant ventral defect grafted with praeputial, buccal or postauricular grafts and the procedure ultimately completed 6 – 12 months later by tabularization of the healed pliable graft. Clinically differentiation between a simple distal hypospadias and a severe proximal one can only definitely be made preoperatively, as the quality of the ventral shaft skin, urethral plate and degree of curvature may render an apparently simple hypospadias very difficult to manage and needing complex staged reconstruction, a caveat that needs to be taken into consideration when contemplating management and especially when counselling patients or their parents (Figure 2).

As the majority of hypospadias cases are seen and managed by

■ A two-way ...

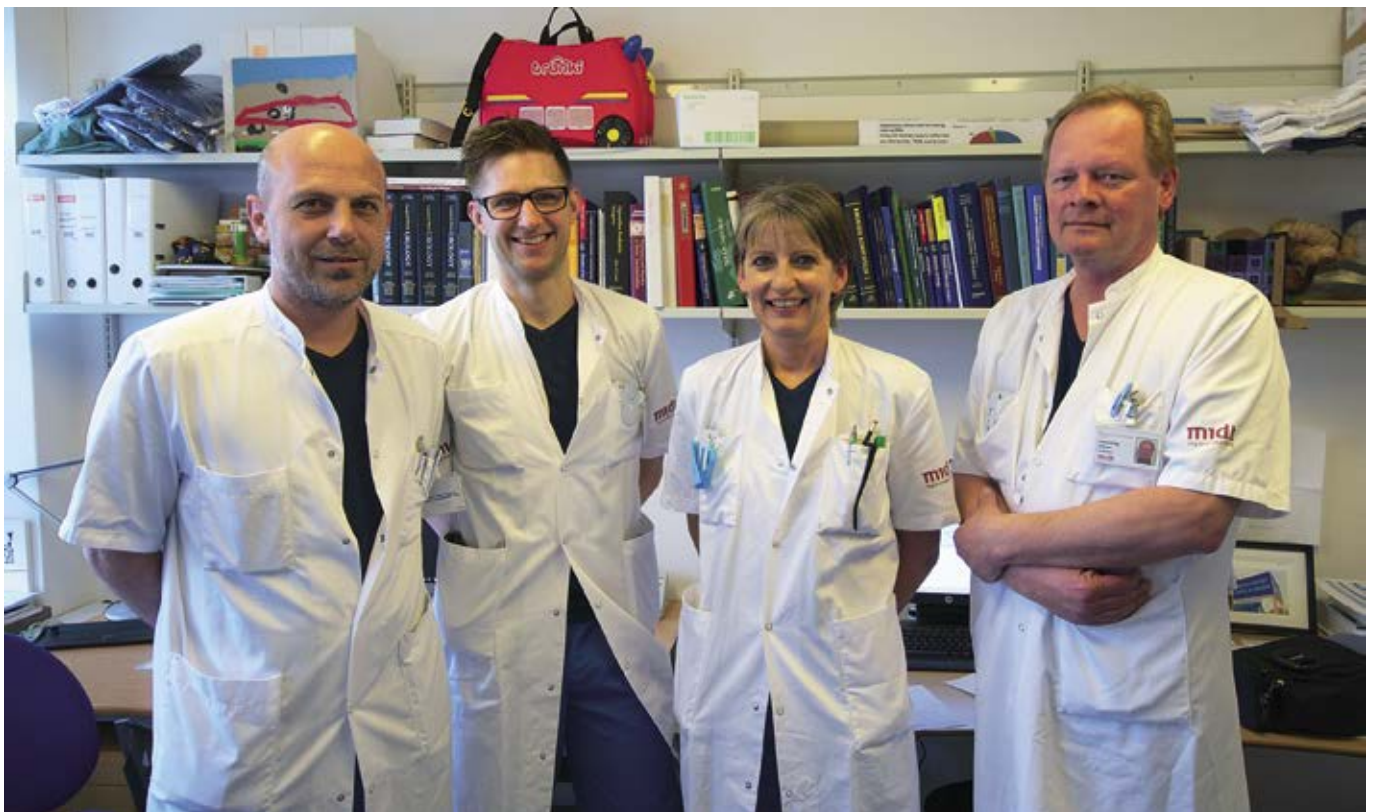


URETHRAL TWO STAGE RECONSTRUCTION:

a) Ventral aspect of penis at second stage, with a nicely healed preputial graft. Graft is mobilised along markings (b), and tubularised (c). Lastly, (d) a tunica vaginalis flap is raised to cover the anastomosis as a second waterproof layer (e) final result.

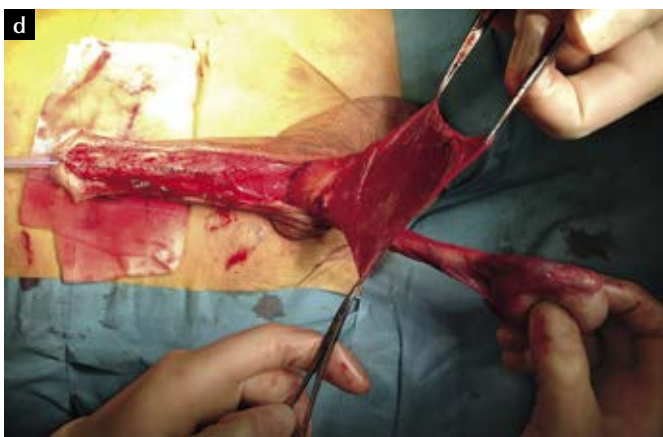
paediatric urologists, it is only natural that the experience needed to manage hypospadias and its long-term sequelae in adults be sought in that subspecialty. We have at the Department of Urology, Aarhus University Hospital – Skejby through our paediatric urology section a long tradition of managing hypospadias in paediatric patients. With approximately 150 – 200 cases being operated per year, we have over the last decade garnered this vast experience to the good of managing adults and adolescents in transition suffering of hypospadias and its long-term surgical

complications. Furthermore, this unique experience has been utilized in the management of complex urethral strictures resulting from trauma and lichenification. In a recent review of our results presented at the Danish Urological Associations Annual Meeting, we presented a retrospective analysis of the outcomes in patients older than 16 years of age operated for hypospadias and long-term complications hereof. In all 67 patients were operated, with approximately 70 % of them being referred to us from urological departments nationally. Surprisingly, a third of these patients were



Professor Olsen (right) and colleagues at the division of paediatric urology at Aarhus University Hospital.

■ A two-way ...



primary cases who had never undergone intervention previously. This is interesting as it is held that scarification and development of balanitis xerotixa obliterans only occurs due to previous surgery, which was clearly not the case here.

Indications for surgery were; significant curvature in 5, urethrocutaneous fistulae in 11, urethral stricture and meatal stenosis in 39 and hair in urethra / cosmesis in 6. In all 81 surgical interventions were undertaken with median age at intervention being 28 (16 – 72) years. Obstructive pathology was managed by internal urethrotomy in 30 %, urethral redo reconstruction in 25 %, meatoplasty 21 % and diversion by urethrostomy in 5 %. A few patients underwent multiple endoscopic procedures of which two ended up with urethral reconstruction. It is here important to point out that patients actively participated in deciding on the course of management and in the few cases mentioned were allowed to opt for repeat endoscopic management despite bleak prospects of other than transient improvement, as they were not ready to consign themselves to major reconstruction. Of the 34 patients who underwent urethral reconstruction (13 two-stage) 28 have been seen for their first follow-up 3 – 6 months postoperatively, none had urethrocutaneous fistulae or recurrence of stricture. One developed keloid scarring of the graft and has since been reoperated and two patients are in need of intermittent autodilatation. These short to medium term results are promising, and all patients are to be followed-up indefinitely as we hope to be able to report on the long-term outcomes in the future.

It can be shown here that paediatric urology, an offspring of urology has matured, taking its roots from the mother specialty and combining it with elements from plastic surgery, reconstructive principles and ultimately tissue engineering, which is actively being developed in Aarhus and other Scandinavian centers, only to be able to give back to adult patients suffering from at times debilitating anomalies and consequences of surgeries performed in previous eras, especially in the absence of wide scale transitional urological care. In conclusion and in order to come full circle, transitional urological care has to be developed as an independent subspecialty, in the watershed between adult and paediatric urology so as to harness the attributes and strengths inherent to both in an effort to provide continuous and coherent urological management and follow-up from cradle to grave. ■



LARS HENNING OLSEN

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www.copenhagenmediacenter.com - foto: Klaus Bentzen

3rd Nordic Course on Radical Cystectomy and Urinary Tract Reconstruction

Rigshospitalet, Copenhagen, Nov. 6-7 2014

TOPICS

Live operations

- Open and robotic cystectomy with open urinary diversions
- Ureter reimplantation
- Parastomal hernia

Lectures

- Operative technique
- Patient selection and counselling
- Complications

Course fee

- Early bird DKK 2.500,-
- After Oct. 1 DKK 3.000,-

Chairmen

- Dr. Lisbeth N. Salling
- Dr. Peter Thind
- Professor Jørgen Bjerggaard Jensen

Wonderful Copenhagen

More details and registration options will be available on www.nuf.nu



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Vaccine against Pneumococci save lives in refugee camp Yida in South Sudan.

Photo: yan libess art



Nordic Courses on Radical Cystectomy and Urinary Tract reconstruction

In November 6-7, 2014 Rigshospitalet in Copenhagen will host the 3rd Nordic course on Radical Cystectomy and Urinary Tract reconstruction.

The first course was held in Uppsala in November 2008 as a joint venture by the Nordic Collaboration Groups for Urothelial Cancer and for Reconstructive Urology and arranged by Per-Uno Malmström and Wiking Månsson. The 2nd course in Malmö was arranged by Per-Uno Malmström and Ralph Peekker.

Approximately 50-60 people participated in Uppsala and Malmö, and the hope is that in the future more young urologists will come. The courses have therefore been focused on decision making in the workouts, and in all the details of the cystectomy, lymphadenectomy and urinary diversions. Experienced urologists have lectured on the different aspects of the procedures including the oncological treatments, appropriate lymph node dissection, registration of outcome and how to decide upon the best urinary diversion for the individual patient.

The idea of having a cystectomy and reconstruction course emerged from the frustrating fact that we still have unacceptably high rates of complications, short- as well as long-term, despite the advances in technique and patient care.

Many changes have been made to diagnose patients that would benefit from cystectomy e.g. patient selection, optimization before and during the operation, better postoperative care - and still we are left with huge challenges and only minor improvements.

The main target group for the course is urologists and doctors interested in cystectomy and reconstruction urology. The hope is that bringing them together from all the Nordic countries we can share experiences and achieve more knowledge to improve the outcome of this complex patients group.

The courses consist of live surgery performed by open and in 2011 and 2014 also robot assisted laparoscopic technique pro-

viding the possibility of debating between the operation theatre and the auditorium.

On the first day in Copenhagen we will cast live surgery with open and robotic technique with two different diversions. On the second day we will focus on complications and show ureter reimplantation to urinary diversion and operation of a parastomal hernia.

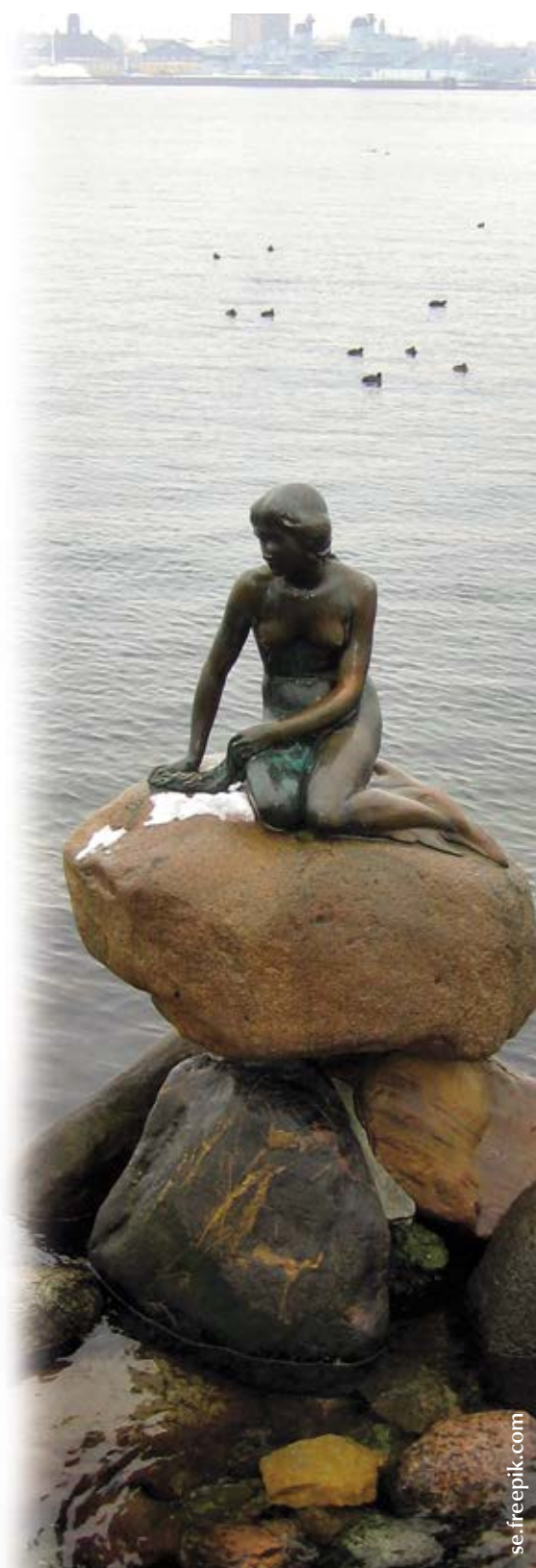
During the live casts, lectures will be given on patient selection and counselling, operative technique with tips and tricks. We will cover the procedures before, during and after the surgery and focus on enhanced recovery after surgery.

On the second day, lectures will be on early and late complications and recommended treatments.

I hope to see you in Wonderful Copenhagen. ■



LISBETH NERSTRØM SALLING
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Does it have to be that difficult? – Benign urology - the pocket edition

Summary from the symposium

The Norwegian Surgical Society arranges the annual meeting in October at Holmenkollen Park Hotel, Oslo. This annual meeting is a combination of lectures and abstracts/presentations, and the program for the different surgical specialities lasts for about three days. For the Norwegian urologist it is an important meeting point, both as a professional and a social happening.

It is never, in beforehand, possible to know the amount of submitted abstracts, that may vary from year to year. Hopefully there will be scientific contributions from all regions in Norway, presenting both benign- and oncologic-urology.

In 2013, the society received fewer abstracts than usual, which in turn gave space to set up an additional symposium. Because mostly of the submitted abstract focused on cancer, it was due time to find another topic for this symposium. The program for the symposium was put together by Anja Løvik (AHUS) and Karin Hjellevang (HUS) (both members of the Nordic LUTD group). Four independent lectures on benign urology illuminated the topic.

We were not sure this topic was excit-



The Saga Hall at the Holmenkollen Park Hotel.

Foto: holmenkollenparkhotel.no

ing or catchy enough, but were positively surprised that the auditorium was almost full and that audience was responsive and eagerly questioning.

Pelvic Floor Centre

Tor Erik Sand, Akershus University Hospital (AHUS), started the session by going through their "Pelvic Floor Centre Model" (www.ahus.bekkensenteret) and how it works at AHUS. He described the way it was created and established in 2007. By

illustrating the working routines of today, he explained how nine different departments manage to conduct an interdisciplinary cooperation. Patients who have a complex problem may be referred. It should be a combination of disorders as f. ex. interstitial cystitis and additional stool problems, or a vaginal prolapse and urinary incontinence. Patients that have been in contact with or treated in the pelvic floor centre evaluate it positively. Another possibility is the Coping-course for patients with chronic pelvic pain and the centre has also made e-teaching programmes. In addition there is established PhD projects connected to the centre.

Urgency-incontinence

The next lecturer, Ole Jacob Nilsen, OUS, Rikshospitalet, spoke about problems associated to urgency incontinence. To conclude with the diagnosis overactive bladder syndrome, every other cause must be excluded (stone, bladdercancer, infravesical obstruction, infection, neurological cause). He illustrated all available treatments today for urgency incontinence. If conservative treatment is tried thoroughly and without success, the patient should be offered muscarinic receptor antagonist or a beta-3-agonist. If this is not tolerated or effective, sacral neuromodulation or the



One konferens room at the Holmenkollen Park Hotel. Foto: holmenkollenparkhotel.no



Holmenkollen ski jump.

Foto: holmenkollenparkhotel.no

use of botulinium toxin may be an option.

If the patient though these treatments still is bother by an disabling urgency incontinence, effort should be put in to discuss surgical treatment as enterocystoplasty or urinary diversion (continent or incontinent) with the patient.

Urethral strictures

Alexander Schultz, Oslo University Hospital (OUH), Rikshospitalet discussed the current treatment of urethral strictures. Dilatation of these strictures does seldom give long standing good results. Internal urethrotomy (Sachs, direct vision internal urethrotomy; DVIU) is the first choice in primary, short urethral strictures. If the patient has a recurrence, one should consider urethroplasty as an option especially if the strictures is > 1 cm and is located in the penile urethra. Urethroplasty is

the best choice when the second recurrence occurs. Internal urethrotomy is not recommended if the stricture is long and complex. Neither patients with BXO nor those with sequela after earlier hypospadias surgery are candidates for DVIU. If urethroplasty is contraindicated, intermittent self-dilatation is an alternative.

It is recommended for posterior urethral trauma that primary care is suprapubic drainage of urine. These patients should thereafter be referred to undergo delayed urethral repair, which have shown to give good results. Both strictures and ruptures could be treated with end-to-end anastomosis. Also anterior trauma could be managed in the same way, with either delayed end-to-end anastomosis or buccal onlay. In Norway most urethroplasties are taken care of at OUS, Rikshospitalet. The incidence of urethral strictures treated yearly

has increased from 20 in 2005 till about 100 in 2012. Probably even more patients are in need of this kind of surgery.

BPS/IC – bladder pain syndrome

Anders Debes, AHUS, problematized this subject. Different definitions exist for this syndrome. A frequent used definition is (ESSIC 2008) 6 months of pains, discomfort or pressure related to the pelvic region and referred to the bladder, accompanied by at least one other urinary symptom as persistent need of voiding or frequency. Other causes have to be excluded. The symptom complex may vary a lot and thereby makes it difficult to characterize the patients. There is not enough research in this field., so it is difficult to practise evidence-based medicine. The lack of consensus, makes diagnosis and treatment even more difficult. Standardised investigations may be supplied by imaging, cystoscopy with bladder dilatation/biopsies, urodynamics, laparoscopy and investigation done by specialist in another field. The treatment should firstly be conservative (not invasive). Secondly it should be a stepwise multimodal treatment. The patient has to be thoroughly informed about different aspects of this disorder and it is mandatory to help them focusing on coping strategies. Of great importance in managing, is the multidisciplinary approach, which is shown to be useful and necessary, alike the situation in patients with other kinds of chronic pains. Opioids as pain relief should be avoided if possible. Both patient and urologist must deal with the expected effect of different treatment modalities, balanced by their risk of complications.

Hopefully this symposium contained some useful tip to ease the work with these challenging patient groups. ■



The view of the Rundkjøringehøj.

Foto: holmenkollenparkhotel.no



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Invitation to

The XVth Course

in Laparoscopic Urology

3-5th Sept 2014

Avoiding, handling and surviving

Scandinavian Academy of
Minimal Invasive Surgery (SAMIS)
& Institute of Clinical Medicine/
Department of Urology

Aarhus University Hospital, Skejby
Brendstrupsgaardsvej 100, entrance 7, basement,
8200 Aarhus N



AARHUS UNIVERSITET



COMPLICATIONS

For more information about the program and fees: www.nuf.nu/Courses.html

Remember early registration, the number of participants is limited to 18!

Due to the limited number of participants, registration will be on a "first come, first served" basis. SO register ASAP!

REGISTRATION & ACCOMODATION ONLINE ONLY
www.urologi.dk, www.nuf.nu or www.espu.org

Dear friends and colleagues

It is once again The Scandinavian Academy of Minimally Invasive Surgery (S*A*M*I*S)' pleasure, to invite you to Aarhus to attend the XVth annual practical course in Laparoscopic Urology which, this year, will focus on complications. Laparoscopy is no longer in its infancy, and with its dissemination into the realm of the conventional, it is now time to address some of laparoscopy's unintended consequences, namely complications.

So in addition to the annually well received practical urologic laparoscopic training on pigs, proctoring and training will mainly focus on laparoscopic complications. A renowned and experienced faculty of Scandinavian and European laparoscopists has there-

fore been assembled to demonstrate, supervise, and lecture on topics that include:

- Patho-physiology of laparoscopy
- Mechanical and technical complications
- Troubleshooting
- Haemorrhage
- Organ specific injury and lesions
- Perioperative complications
- Convert vs. continue

All backed up by real time lab simulated catastrophes and clinical scenarios where possible.

Trainees will also get the chance to brush up on their general urologic laparoscopic skills with regards to black box training, trans / retroperitoneal access to the kidney, ureter, intracor-

poreal suturing techniques, pyeloplasty, heminephrectomy/partial nephrectomy. The number of participants in the animal lab is limited to 18, with 3 participants per pig.

The course, now in its fifteenth year, is therefore aimed at laparoscopic urologists and laparoscopic paediatric urologists at any level of training as complications are not only specific to the novice but also occur to the expert who becomes more daring and expands his / her territory, pushing the envelope to new limits.

And remember there are two types of surgeons; those who have complications and the liars!

We welcome you to Aarhus.

Urinary incontinence after radical prostatectomy, definitions and predictors

INTRODUCTION

Urinary incontinence increases the risk for impaired quality of life and is a significant long-term complication after radical prostatectomy (RP)¹. The reported rate of urinary continence 12 months after RP varies widely in the literature; from 48% to 93.7%². This is a significant variability and the reasons might be the methodology for assessment, the surgeon's experience, the surgical technique and variations in the definition of continence.

Apart from the above factors, preoperative factors might also influence the rate of urinary incontinence after RP. A lot of studies have been performed to evaluate what factors that might play a role and several studies have found age as an independent predictor of the return of urinary continence³⁻⁹ on the other hand, others have found no association between the two¹⁰⁻¹⁴. Two studies have reported that age delays reaching continence¹⁵⁻¹⁶. Baseline incontinence^{4,6}, previous TURP^{4,5}, obesity^{17-18,9}, non-preserving surgery of the neurovascular bundles⁵⁻⁸ and postoperative anastomotic stricture⁷⁻⁸ are other factors that have been found to be significant risk factors for postoperative incontinence. To conclude, results from previous studies differ to a large extent.

In this report I will present some results from the two first articles in my ongoing PhD-project, both concerning urinary leakage after radical prostatectomy. *Pad Use and Patient Reported Bother From Urinary Leakage After Radical Prostatectomy* was published in Journal of Urology in 2012¹⁹. In this study, we investigated the relationship between urinary leakage and patient-reported bother from urinary leakage, to better understand clinically significant definitions of urinary incontinence. The second article *Patient and tumour-related factors for prediction of urinary incontinence after radical prostatectomy* was published in Scandinavian Journal of Urology and Nephrology in 2012²⁰. In this article we aimed to identify patient- and tumour-related factors that could predict incontinence after radical prostatectomy.

PATIENTS AND METHODS

Study no 1

Pad use and patient-reported bother from urinary leakage

All consecutive patients at Karolinska University Hospital that underwent radical prostatectomy (open surgery or robot-assisted laparoscopic surgery) for prostate cancer between January 2002 and December 2006 were included in the analysis, a total of 1,411 patients. No exclusion criteria were set. Clinical data were prospectively collected on biopsy Gleason score, clinical stage, and preoperative prostate specific antigen. Routine pathology reports provided data on prostate weight. Functional outcome was assessed with a validated patient questionnaire postoperatively with an emphasis on urinary and sexual function. Postoperative incontinence was analyzed with two questions on urinary leakage and to evaluate the effect of postoperative incontinence urinary bother was evaluated (see questions in Appendix).

To calculate the proportion of patients with moderate or much bother from urinary leakage a statistical analysis was done comparing groups using relative risk, defined as the ratio of proportions, which was estimated according to the log binomial regression model and presented with the 95% confidence intervals.

Study no 2

Predictors for postoperative urinary incontinence

The data for this study derived from LAPPRO; a prospective, non-randomized clinical trial with the aim to compare robot-assisted laparoscopic with open radical prostatectomy²¹. The study has enrolled more than 4,000 men. The present study is a prepara-

APPENDIX

Study Questionnaire Urinary Leakage and Bother Questions

Leakage

1) **During the past 6 months how often did you change your protective pad during a typical day?**

- Not applicable, I don't use any protective pad
- Less than 1 pad/day
- About 1 pad/day
- About 2-3 pads/day
- About 4-5 pads/day
- About 6 pads or more/day

2) **During the past 6 months how much urine did you leak in the daytime?**

- Not applicable, I don't leak urine in the daytime
- Little
- Moderate
- Much

Bother

1) **During the past 6 months, if you have had urinary leakage daytime and you would have to live with it the rest of your life, how would you find that?**

- Not applicable—I don't have any leakage
- It wouldn't bother me at all
- It would bother me slightly
- It would bother me moderately
- It would bother me much

■ Urinary incontinence ...

tory study, based on the first 1,529 men included in LAPPRO with one-year follow-up. It is a multicentre study and fifteen urological departments in Sweden included patients. Patients underwent radical prostatectomy (robot-assisted or open retropubic) for clinically localized prostate cancer between September 2008 and January 2010. Data were prospectively collected with validated study-specific questionnaires preoperatively and at 3 and 12 months postoperatively. Clinical information was documented through validated study-specific case report forms (CRFs). A detailed description of the study design and the development of the questionnaires and CRFs has previously been published.²¹

Urinary incontinence, was evaluated with the following question: "How often do you change pad, diaper or sanitary aid during a typical day (24 h)?" with response alternatives "Not applicable, I don't use any protective pad; Less than once/day; About once/day; About 2–3 times/day; About 4–5 times/day; About 6 times or more/day". Incontinence was defined as the change of one pad or more per day.

In the analysis of the association between the preoperative factors and postoperative urinary incontinence the effect measures were relative risks, defined as the ratio of proportions, estimated according to the log-binomial regression model presented with 95% confidence intervals. Age-adjusted relative risk was calculated in the corresponding bivariate regression model with age added. The estimates obtained in the log-binomial model of age at surgery and urinary incontinence were used to show the exponential curve describing the increased probability of leakage with age. This was illustrated together with a step function showing the proportion in each age group changing their pad at least once a day.

RESULTS

Study no 1

Pad use and patient-reported bother from urinary leakage

Questionnaires were returned by 1,288 patients (91%) and 1,179 of these had 1-year followup or longer, 411 underwent open retropubic radical prostatectomy and 768 underwent robot-assisted laparoscopic radical prostatectomy. Overall median age at surgery was 63 years (range 37 to 78, IQR 58–67), median age at followup was 65 years (range 41 to 79, IQR 61–69), median followup was 2.2 years (range 1 to 5, IQR 1.6–3.3). Median preoperative prostate specific antigen was 6.9 ng/ml (range 0.4 to 117, IQR 5.0–9.7).

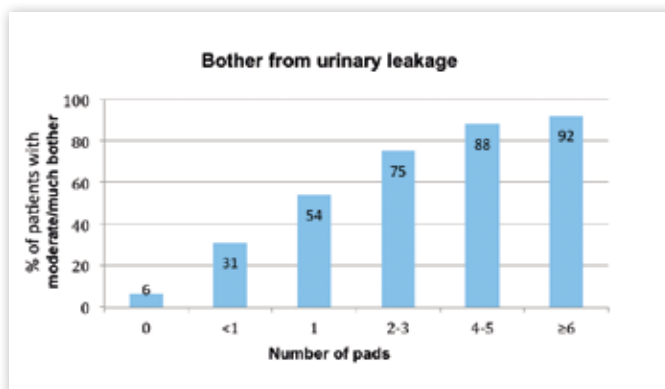


Figure 1a. Moderate or much bother from urinary leakage correlated to the daily pad requirement.

Of 1,163 patients 775 (67%) reported no pad use, 123 (11%) reported less than 1 and 143 (12%) reported 1 pad used per day. Pad status correlated to urinary bother show that men who used security pads (fewer than 1 per day) had more than 5 times higher risk for moderate or much bother from urinary leakage compared to those using no pad (RR 5.2, CI 95% 3.5–7.7). The risk of bother increased as the number of pads increased (Figure 1a). Urinary leakage question number 2; 534 of 1,160 men (46%) reported no leakage while 504 (43%) reported little leakage and showed a significant increase of bother for little vs no urinary leakage (RR 22.0, CI 95% 10.5–46.7). As the leakage rate increased the risk of bother increased (Figure 1b).

To evaluate the responses to the urinary leakage questions we compared answers using cross-tabulation (Table 1). At a follow-up of 1-year or more 776 survivors (66%) reported using 0 pads per day, including 514 (66%) who reported no and 255 (33%) who reported little urinary leakage. Patients using fewer than 1 pad per day 14 (11%) reported no leakage and 101 (82%) reported little leakage. Daily pad requirement varied widely in the group that reported little leakage. Of those patients 255 (51%) used 0, 101 (20%) used fewer than 1 and 104 (21%) used 1 pad per day.

Study no 2

Predictors for postoperative urinary incontinence

Questionnaires were received from 1360 men (89%) with follow-up of 12 months. Median age at surgery was 64 years (range 41–77 years) and median preoperative PSA was 6.4 ng/ml (range 0.1–99.0 ng/ml). Preoperative clinical stage was T1 in 771 patients (58%), T2 in 490 patients (37%) and T3 in 32 patients (2%). The overall incontinence rate at 12 months was 34% with definition more than zero pads per day, 24% with one pad or more per day, 11% with two pads or more per day, 3% with four pads or more per day and 1% with six pads or more per day.

Age at surgery and preoperative urinary leakage were both significantly associated with 12 months postoperative incontinence. If the age at surgery was 60 years or older there was a significant association with incontinence at both 3 months and 12 months postoperatively. Among men age 65–69, 29% (112/388) were incontinent at 12 months postoperatively compared to 13% (15/118) in the group age 40–54 years, a relative risk of 2.3 (95% confidence interval (CI) 1.4–3.7). In the older group, age 70–80

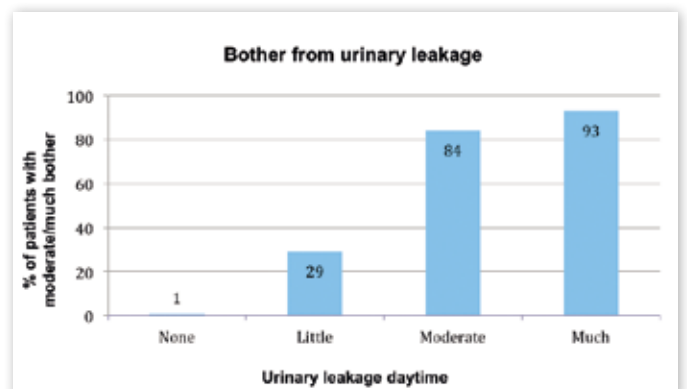


Figure 1b. Moderate or much bother from urinary leakage correlated to urinary leakage daytime.

■ Urinary incontinence ...

Cross tabulation of urinary leakage and pad requirement								
	Daily pad requirement							Total
	0 ^a	< 1 ^b	1	2-3	4-5	≥6	Not stated	
Urinary leakage daytime past 6 months								
No leakage	514	14	5	0	0	0	3	536
Little	255	101	104	37	3	3	3	506
Moderate	3	8	31	31	5	2	0	80
Much	0	0	1	17	17	7	0	42
Not stated	4	0	2	0	0	0	9	15
Total	776	123	143	85	25	12	15	1179

^a Not applicable, I don't use any protective pad

^b Less than 1 pad/day

Table 1. Cross tabulation of urinary leakage and daily pad requirement

years, 38% (55/145) of the men were incontinent 12 months postoperatively, a relative risk of 3.0 (95% CI 1.8–5.0) compared to the group age 40–54 years. In our study the increased risk for incontinence at higher age was not linear and could be described with an exponential function (Figure 2).

Patients with urinary leakage before prostate cancer diagnosis 40% (27/67) were incontinent 12 months postoperatively compared to 22% (258/ 1149) in the group without preoperative urinary leakage. This leads to an age-adjusted relative risk of 1.8 (95% CI 1.3–2.4) of postoperative incontinence in the group with preoperative urinary leakage compared to the group with no preoperative leakage. Presence of kidney disease, depression and mental disorders showed a significant increased risk for incontinence 12 months postoperatively; however, these groups were small.

In addition to the factors described above, 36 other factors concerning clinical data, comorbidity, previous surgery, lifestyle factors, etc., were evaluated. No significantly increased risk for postoperative incontinence could be seen in any of these factors.

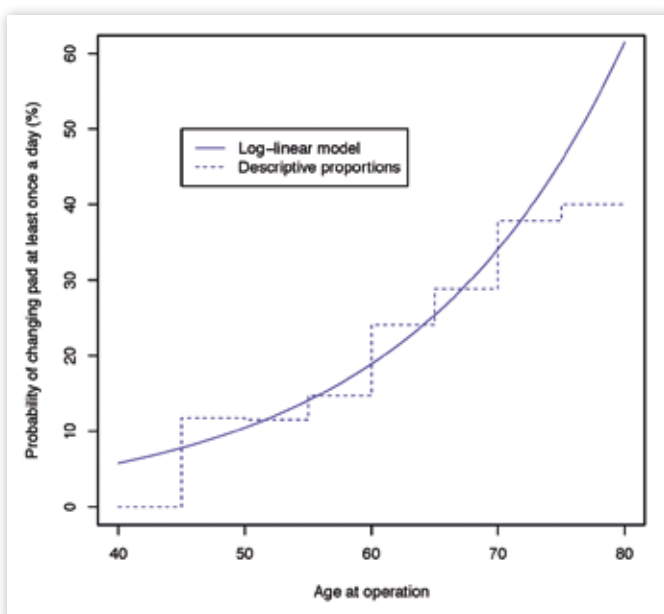


Figure 2. Likelihood of 12 months postoperative urinary incontinence with increasing age at surgery.

DISCUSSION

Study no 1

Pad use and patient-reported bother from urinary leakage

If the definition of continence consists of pad use, a certain number of men who experience moderate or much bother from urinary leakage will nevertheless be considered continent. Men reported a wide variation in the pad requirement for each stated rate of urinary leakage. In addition, some patients who only have occasional, small amounts of leakage are still bothered moderately or much by their urinary leakage.

The definition of continence was evaluated by Liss et al in a study of 500 consecutive men after radical prostatectomy by examining the association of pad status and urinary bother score²². The group found a significant difference in the urinary bother score between men who reported using 0 pads vs a security pad (mean ± SEM score 2.78 ± 0.16 vs 1.16 ± 0.08). They stated that continence should be strictly defined as 0 pads. Furthermore, Reynolds et al examined the records of 1,005 survivors after robot-assisted radical prostatectomy for continence variables and urinary bother scores after surgery²³. They came up with a new definition for continence; leak-free, pad-free continence which was defined by combining answers to two urinary incontinence questions on which survivors had answered "urinary leakage - not at all" and "no use of pads." The urinary bother score was significantly lower at 12 months of follow-up than at baseline in survivors who were leak and pad free preoperatively (82 vs 90, p = 0.002). In our study there was a highly increased risk of bother at a low frequency of urinary leakage. When evaluating pad status 6% in the 0 pad group reported much or moderate bother. The relative high bother in this group might be explained by simply recognizing that no pad use is not always equivalent to no leakage. In our study leak-free and pad-free men reported only 1% (5/514) moderate or much bother. Thus, if the definition of continence is leak- and pad-free it will result in the classification of only a few men as continent who are bothered by leakage.

In a study of Rodriguez et al they report that 69% of men with pad-free status claimed occasional leakage²⁴. Preoperatively they were older, had greater prostate weight, higher preoperative and postoperative American Urological Association symptom scores, and urinary bother scores. The cross-tabulation of the relationship between pad use and urinary leakage from our study reveals

■ Urinary incontinence ...

a wide variation in pad use despite the same answer to urinary leakage questions. This finding indicates that pad use depends on many factors, of which the degree of urinary leakage is only one factor. Pad-free status according to the available data does not always imply continence, since 33% of men who reported no pad use, also reported little urinary leakage. Pad size is another important aspect, which is seldom discussed, that could explain the major variation in pad use. This information is not included in the question of pad status, however it could refine our possibilities of describing how pad use and urinary bother are associated. Our results indicate difficulty in interpreting the answers based on pad status since survivors tend to change pads differently, often quite independently of the rate of urinary leakage and without reference to the size of the pad in question. These factors would be less important if the definition of continence were 0 pads.

The strengths of this study are the high participation rate, the questionnaire based method and the large population evaluated. The main study limitation is that the method to evaluate urinary leakage was not objective. However, using a more objective method such as performing urodynamic assessment or a pad test would have been difficult due to the large study population. No study exclusion criteria were set which could have included possible modifying factors.

Study no 2

Predictors for postoperative urinary incontinence

Today, most of the available data suggest that there is a correlation between age at surgery and the risk of long-term urinary incontinence after radical prostatectomy. Now it remains to be understood how risk increases with higher age, what it is in the ageing process that causes the increased risk and which factors may interact. Similar results have been reported by Nilsson et al. in patients aged 70 years or older: 19% had urinary incontinence compared to 6% in men aged 54 years or younger, giving a prevalence ratio of 3.4 (95% CI 1.5–8.1). Their data showed that age at surgery predicted long-term urinary incontinence in an exponential manner with an estimated relative increase of 6% per year²⁵.

Previously it has been reported that older men do not have perfect urinary continence. Litwin²⁶ evaluated a population-based sample of men aged 47–86 years (mean 72.5) without prostate cancer. Using validated questionnaires they found that 10% repor-

ted urinary leakage on a daily basis and 8% reported urinary leakage about once a week. This indicates that, regardless of prostate cancer diagnosis and its treatment, middle-aged and older men have urinary leakage. The explanation for the increased rates of incontinence due to higher age could have several possible mechanisms such as a weaker sphincter or poorer healing in older men.

Strengths of this study are the large cohort, the high response rate and the data collection method; the data were collected prospectively using validated questionnaires. The major limitation is the subjective method for measuring urinary incontinence. However, it was not feasible to evaluate this large cohort in an objective way (e.g. pad test or urodynamic assessment) and nowadays number of pads is commonly used in the literature. Another limitation is that no discrimination was made between stress and urge incontinence. Furthermore, the study is a multicentre study including both high- and low-volume centres. No distinction was made between the two in the analysis. The study also includes patients that have been operated on by surgeons who had operated fewer than 100 cases, i.e. during training. The relatively high frequency of incontinence could probably be explained in part by this and be seen as a limitation. However, it can also be regarded as a strength, as the result represents a kind of average reality, i.e. validity.

CONCLUSIONS

Study no 1

Pad use and patient-reported bother from urinary leakage

Our study shows that no pad use is not equivalent to complete urinary continence. Considering this, pad status as a definition of continence is not without limitations and each definition has its pros and cons. Results show wide variation in pad use for the same degree of urinary leakage as well as a highly increased risk of urinary bother even at a small rate of urinary leakage. The bother from urinary leakage can be considered more clinically important than the actual grade of urinary leakage. Thus, to evaluate urinary incontinence we recommend measuring both urinary leakage and the bother from urinary leakage. Using the same definition of urinary continence would facilitate the comparison of continence rates in different populations.

Study no 2

Predictors for postoperative urinary incontinence

In a cohort of 1529 men with clinically localized prostate cancer this study found that old age at surgery and preoperative urinary leakage result in a higher risk for postoperative urinary leakage one year after radical prostatectomy. These findings may help the surgeon to have a targeted risk conversation with the patient before the treatment decision is made.

Short summary

- If the definition of continence is based on pad use, for example "safety pad", a certain number of men who report moderate or much bother from their urinary leakage will be defined as continent. In addition to this, our results show that for every stated rate of urinary leakage men prove to have a major variation in pad requirement.
- Of 38 possible risk factors only age at surgery and preoperative urinary leakage were associated with 12 months postoperative incontinence in our study comprising 1529 men operated with radical prostatectomy.

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The Working Group for Reconstructive Urology within the Scandinavian Association of Urology

For the present year I have had the privilege to act as a chairman of the Collaboration group of reconstructive Urology within SAU. I was appointed to the job in a meeting that I could not attend. The term of the chairmanship was scheduled to last for 3 years. I have been one of the Finnish delegates in the group for the 4 past years.

Our group is getting together twice a year at the home cities of the group, but due to many other obligations of the members, once a year meeting could be more practical. As we meet, we discuss new study ideas, plan educational courses, have conversations about all aspects of reconstructive urology. An interesting thing is to hear how differently governmental issues are organized in different Nordic countries. In every country the ever growing bureaucracy seems to be the major obstacle in hospital all day work or even bigger when starting new studies.

The members of our group are also members of the ESGURS (EAU Section of Genitourinary Reconstructive Surgeons) and we see each other also during meetings arranged by that society.

At the moment our members listed besides me are Ilkka Paananen from Finland, Ole Jacob Nilsen, Yngve Nygård and Thomas Davidsson (Norway), Ralph Peeker and Lars Henningsohn (Sweden), Erik Højkjær Larsen, Henning Olsen, Lisbeth Nerstrøm Salling (Denmark); Eirikur Jonsson (Iceland).

Our members are appointed to their positions by national urological societies.

The founder of the group Wiking Månsson was successful in launching prospective multicenter studies within the group. At the moment ongoing prospective trials on reconstruction in Nordic countries are run nationally. The study on two operative techniques of urethral strictures (Ole Jacob Nilsen in this booklet) is about to start and it will be a landmark study on that topic.

If a reader of this copy is having a promising idea of a new study and needs co-operation from Nordic countries, please don't hesitate to contact us. Our group could help you to introduce the idea through SAU network.

The Working Group for Reconstructive Urology has kept courses on different topics of reconstructions in biannual SAU meetings and if the local organizers allow us, we will continue the tradition.

There is a highly recommended course upcoming on 6th to 7th November 2014 on radical cystectomy and tract reconstruction in Copenhagen. Hopefully members interested on the topic will participate. The colleagues in Rigshospitalet will execute a high quality educational course. ■

JUKKA SAIRANEN
Helsinki University Hospital,
department of Urology
chairman of the working group
for reconstructive urology



■ Next NUF-Bulletin

Next issue

Next issue of NUF-Bulletinen will be published in December 2014.

We are looking forward to your contribution to the magazine. Don't hesitate to send your article/abstract/meeting report to the editors.

Deadline for issue 2/2014 is October 30.

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■ Calendar

Calendar

Nordic events and courses 2014

3–5 September

The XVth Course in Laparoscopic Urology, Aarhus, Denmark

Registration:

<http://www.kongreskompagniet.dk/samis2014>

5–10 September

Prague, Czech Republic 12th European Urology Residents Education Programme (EUREP)

12–16 October

34th SIU Congress, Glasgow, Scotland

More information:

<http://www.siucongress.org/>

6–7 November

3rd Nordic Course on Radical Cystectomy and Urinary Tract Reconstruction

More information:

See page 18

www.nuf.nu

4th SPCG Clinical Research Grant

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