SSG Orthopaedic working group, Copenhagen 28-29 nov 2011

* **Referral guidelines for Soft tissue tumours**: Joint session with Radiology group.
Emelie Styring, Lund and Olga Zaikova, Oslo

Last year the radiology group suggested publication of guidelines for basic MRI investigations of orthopaedic tumours on the SSG web site. In this context these instructions should also include a reference to clinical guidelines for referral of tumours to sarcoma centres for further evaluation. These guidelines are; all deep tumours and superficial tumours larger than 5 cm should be referred promptly to centres before surgery. It was then noted that there are a considerable number of superficial soft tissue sarcomas with a size less than 5 cm in the SSG register. The guidelines were questioned both with respect to this finding and the fact that MRI may be used with great accuracy in the diagnosis of lipomas. Therefore the request of MRI investigation before referral to sarcoma centres was discussed
Emelie Styring presented a new study from Lund where adherence to guidelines and referral pattern in the Southern Sweden health care region was investigated and Olga Zaikova presented how guidelines and referrals are handled in Oslo. Briefly, the stategies are rather similar but while Lund do not require any radiological investigations before referral, Oslo has found that for their organization MRI investigations before referral is preferred and more efficient.
In Scandinavia we may conclude that compared to most other countries in the world we have been successful with respect to centralization of sarcoma management. We have common guidelines and the way in which the different centres work are quite similar, but do differ to some extent. We do not regard this as a problem but we decided that the Guidelines for referral of soft tissue tumours presented on the SSG website should be written in a way which all centres can agree.

Conclusion: Revision/additions (MRI/lipomas, and children) to the present guidelines until next meeting. However, guidelines for referral of STT´s must be kept simple. Guidelines/recommendations for basic radiological investigations of orthopaedic tumours are now to be published on the SSG website.

*** What should sarcoma centres do and not do**?
Otte Brosjö, Stockholm

Discussion regarding which tumours should not be operated at sarcoma centres. Reflections on new political aims at ”health service guarantees”, ie evaluation by specialist and treatment within a specified time limit. This may inflict on availability of highly specialized health care such as management of malignant tumours at sarcoma centres. Since many patients referred to centres end up with benign diagnoses a ”crowding” effect may arise where benign tumours outnumber malignancies to an extent where sarcomas will not be handled efficiently. Stockholm will now refer most patients with benign tumours for surgery outside center.

Conclusion: This issue has been discussed at many centres. However, different countries and health care regions do not have the same structures and no uniform pathway for the future was set. This type of problem, we believe, can not be solved from a common SSG-strategy.

* **Reconstructive surgery in EWS and OS**: has adherence to protocols and postoperative radiotherapy changed the indication/possibilities of biological reconstructions?

O. Brosjø, Stockholm

Choice of surgical approach and reconstruction in bone sarcoma is individually planned, and in some patients a biological reconstruction is preferred. Radiotherapy (RT) after such reconstructions may result in failure of healing. Protocols used in bone sarcomas recommend/require that adjuvant radiotherapy is given if chemotherapy response is poor and/or surgical margins are considered inadequate. In some cases the risk of inadequate margins may be calculated preoperatively but neither margins nor response is known before surgery. Hence, the choice of reconstruction is more a question of what is considered the most suitable choice for the patient on a long term basis. However, should the surgical methods be adapted to the possibility of adjuvant radiotherapy ? This issue was discussed.

Conclusion: Margins and response are not known preoperatively. Postoperative RT may inflict on results with respect to reconstruction. However, we concluded that the choice of surgical method will not change despite this uncertainty.
Moreover, the evaluation of margins was discussed. We agreed that this should be made in consensus by surgeon and pathologist.

* **Presentation of sarcoma centres**: A proposal of having regular presentations of the different sarcoma centres at our meetings.

O-J Norum, Oslo

In the orthopaedic group we discussed the fact that despite yearly meetings, all of us do not know the different centres very well. In order to get to know each other better and exchanging experiences in eg organization, traditions and methods a standing theme of centre presentations on our meetings was suggested and discussed. O-J Norum presented the Oslo sarcoma centre at this meeting.
This type of presentation is not supposed to be a comparison of size of centres, number of patients or surgeries performed but rather an introduction of who we are, how we are organized and how we do things.

Conclusion: A very good idea. Will be introduced next meeting with presentation of other, maybe all, centres. This type of presentations may also be interesting for the other working groups in the SSG.

* **Enchondroma vs low-grade chondrosarcoma**:

R Löfvenberg, Umeå

Cartilage tumours are well known to be a diagnostic challenge. In this presentation the possibility to differentiate between an enchondroma and a low grade chondrosarcoma was discussed. Neither radiological investigations nor cytology can with certainty distinguish between the two entities. Treatment and follow-up recommendations were discussed.

Conclusion: Cartilage tumours are tricky!

* **Role of antiresorptive drugs in bone tumours**
Mehdy Farhang, Umeå

Use of bisphosphonates (BP) and Denusomab in eg GCT, fibrous dysplasia and bone cysts (simple and ABC) was discussed.

Conclusion: BP´s in the treatment of these diagnoses are studied to some extent but are not well established. A possibility to use Denusomab at a ”wider” indication for GCT was discussed.

*** Isolated limb perfusion:** an update
Peter Bergh. Göteborg

Study of 54 patients (14-94 yrs) with STS of limbs. Patients included were considered ”inoperable” or treated with palliative intention. In 70 % a clinical response was observed. In 30 cases surgery was performed after treatment with ILP. Recurrence was observed in 2/19 treated for primary tumour and in 7/11 treated for recurrent diseaese. Amputation was performed in 13/54 cases. FU median 30 months. 5-year survival 44 %.

Conclusion: An alternative to mutilating surgery. Centralized treatment. Selected patients. Limb salvage possible.

* **Randomized trial of surgical margins in subcutaneous STS**; WIGWAMS (What Is a Good Acceptable Margin for Superficial Sarcomas)
C Trovik, Bergen

A proposal of SSG centres taking part in an international randomized study of management of superficial soft tissue sarcomas (STS). This study has been suggested by Dr Grimer, UK, with the aim to try to define what is a good/acceptable (”wide”) surgical margin. The definition is not clear and obviously centres in the international sarcoma ”community” have different criterias for when to accept a certain surgical margin, and hence the indications for a reoperation with extended excision, adjuvant radiotherapy or neither do vary. The plan for this study was introduced by Clement Trovik and discussed within the group.

Conclusion: A skeptic positivism ? A possible study, but more informationen needed before decision. Dr Trovik will continue by discussing the conditions of the study with Dr Grimer.

Infection rate after implantation of megaprostheses: proposal for a SSG study
Markus Nottropp, Bergen

Bone resection and reconstruction with megaprostheses in patients with primary bone tumours is a high-risk procedure. Patients often have received preoperative chemotherapy and soon after surgery continue this therapy. Large surgery in combination with immunosuppression is not optimal and an infection may result in failure of the reconstruction, and even amputation. The rate of infection in this type of surgery has previously not been evaluated in the SSG, but was now suggested as a possible study.

Conclusion: Markus Nottrop will now start the investigation in Bergen. Later, more centres

may be involved and after further discussions this may result in a study with several SSG centres as participants.

*** Cases**
Several interesting cases were presented and discussed.
Among these were:
An unusal, almost fatal, complication following revision of a tumour prosthesis: Fatty embolism syndrome; very unusual, dramatic and associated with a high mortality.
Björn Gunterberg, Göteborg

Hemicorporectomy: A man with advanced, mutilating and life-threatening neurofibromatosis. This patient suggested this drastic, and unique, operation himself. He contacted the Stockholm sarcoma centre and the operation was considered possible .
The surgery was dramatic but was performed according to plan and went well.
Otte Brosjö, Stockholm

Fredrik Vult von Steyern
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