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THE MANAGEMENT OF SEMINOMA IN EDINBURGH*

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Good management of seminoma depends on

1. High index of suspicion when faced with testicular swellings even if these are painful.
2. Accurate histopathology.
3. Aggressive treatment.

If these principles are followed one may expect an overall survival rate for all cases at 5 years of 80%, with in excess of 95% survival for stage 1 disease. The need for aggressive treatment is, however, emphasized by the fact that 20% of patients still may not survive. Newer chemotherapeutic regimes (BEP: bleomycin, etoposide, cis platinum) associated with more accurate staging techniques (CAT scanning) should result in an improvement on the above figures in the near future.

Diagnosis — should be suspected with any testicular swelling usually in men in the age group 30 - 40. Often there is a misleading history of minor trauma and the swelling may be painful. Exploration should be by the inguinal route because scrotal exploration carries a significant risk of dissemination into the wound and if this happens further treatment is complicated.

Histopathology — by an experienced pathologist is essential if seminoma and spermatocytic seminoma are to be distinguished accurately from embryonal carcinoma. If this distinction is not made then results of treatment will vary because some patients will receive inappropriate treatment.

Appropriate treatment — this is determined according to the stage of the tumor:

Stage 1: Tumor confined to testis.

Stage 2: Abdominal nodes only.

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* Data from the Department of Clinical Oncology, Edinburgh, United Kingdom, by courtesy of Professor Duncan[1].

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Stage 3: Mediastinal nodes and/or supraclavicular nodes.

Stage 4: Blood borne metastases.

Staging is determined by intravenous urogram, chest X-ray, CT chest and abdomen, lymphangiogram and tumor markers including PLAP (placental alkaline phosphatase). Tumor markers except PLAP will be negative if the case is truly seminoma.

If the staging investigations reveal no spread or if there is abdominal node involvement of less than 5 cm, treatment is by inguinal orchiectomy and radiotherapy to the abdominal lymph nodes (30 GY in 20 daily fractions). The majority (80%) of cases seen in Edinburgh fall into the above group. If abdominal nodes are bulky (greater than 5 cm) then treatment is by 3 courses of BEP with radiotherapy to bulk disease. Stage 3 cases are treated likewise with additional radiotherapy to bulky mediastinal metastases. In stage 4 disease treatment is by chemotherapy with BEP repeated if possible every 4 weeks for four to six courses.

Effective management of seminoma depends on accurate assessment and progressive treatment. This requires a skilled team of clinicians, pathologists, diagnostic radiologists, oncologists and nursing staff. It is not economically possible to provide this teamwork other than at specialist referral centers.

REFERENCE

1. Duncan WD. Management of testicular tumours, The Frederick Price Lecture. In *Symposium on Medical Management of Malignant Disease*. Edinburgh: Royal College of Physicians, 1983, pp 49-70.

DISCUSSION

İşeri: I would like to learn what procedure you follow when faced with a patient with a seminoma and elevated HCG after orchidectomy.

Hargreave: At present these are treated as cases of seminoma; I think it's a point of argument whether these are actually teratomas or seminomas but the policy — if they get the regime I've described to you and if the markers return to normal and if there is no evidence of any bulk abdominal disease — is to give radio-therapy to the abdominal nodes and that's it. They must be followed up, of course.

Akdaş: I would like to describe our experience in the treatment of seminoma. We have been treating 29 patients over the last 13 years, for pure seminoma (stage I) and 6 patients with stage II disease. We have had only one death, a stage II patient. In stage I the follow-up has been for more than 5 years. We have been treating these patients with radical radiotherapy and the results are, as you say, satisfactory.

Ünlüer: I have a question for Doctor Akdaş. What do you think about debulking surgery in such cases?

Akdaş: Yes, we were planning to talk about this during the panel discussion; so far we have had only a very little preliminary experience. We have one patient with terato-carcinoma among the stage III patients; this patient was given chemo-therapy, and the markers went down. We then removed the bulk which had actually turned to teratoma.

Blandy: Well, I think there is quite a lot to be explained about debulking surgery, and so let's postpone that. I'd like to ask you whether you've had any experience of using a single agent for chemotherapy for seminoma?

Akdaş: Not really. With one of our patients we used Holoxone that's the only experience we've had.

Blandy: Well, a colleague on my oncology group is working on this with a small number of patients, and he has had the most dramatic results with a single agent, JM8 probably. He's so impressed with the results of single agent chemotherapy on these people, many of whom had a very widespread and bulky form of the disease, that he's now wondering whether this won't entirely replace radio-therapy. It's quite an interesting new concept. What about permanent damage to the peripheral nerve, have you had any of that?

Akdaş: No, we've had transition trouble, but they've always recovered.

Blandy: I'm tremendously impressed. You haven't had a death in your series?

Akdaş: No, no deaths with chemotherapy.

Blandy: I think you ought to be congratulated, because we've had one death. It was in the earlier, learning period when we lost a patient, probably through not paying special attention to the over hydration that's required. Most groups using this kind of chemotherapy have had the odd death.

Khalifa: These mortalities you mentioned, what were they due to? Bone marrow regression or what?

Blandy: The case I referred to was bone marrow regression.

Akdaş: Have any of your patients claimed for testicular prosthesis after orchidec-tomy?

Blandy: One. Have any of yours?

Akdaş: One with us too.

Blandy: Testicular prosthesis in cancer, always seems to be one extra thing you're doing to a patient who's already had enough. If they insist on it I say "Well fine, if

you still want it in 6 months time". After 3 months, however, they just want to stay away from hospital. And the other thing is that they really don't deceive anybody. None of the testicular prostheses I've ever got would really be very convincing; I suppose it's better than nothing.