Pelvic Ewing’s sarcoma — 20 years experience.

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Introduction

Despite the improved survival of patients with Ewing’s sarcoma, pelvic location remains a bad prognostic factor. This retrospective analysis tries to point out the reasons of such a situation, and to evaluate the impact of modern comprehensive approach on prognosis.
Patients

From 1977/2 to 1998/6, 53 patients have been treated by our group for Ewing’s sarcoma of pelvic bones.

- 32 were males, 21 females aged 6 to 35 years (median 16.3).
At first screening the tumoral volume assessed from CT or NMR averaged: 430 cc médian: 240 cc
Initial staging

- At first screening 15 patients had already metastases
- Among them 7 with regional bone metastases on NMR
- And 38 presented with localised disease.
Treatment included chemotherapy for all patients according to the current protocol at the time of presentation: four drugs (Vincristine – Dactinomycin – Cyclophosphamide – Doxorubicin: V Ad CA), five drugs (VAd CA + ifosfamide) or six drugs association (IVAd CA + Etoposide or Cisplatinium).
Local treatment

- used radiotherapy alone for 24 patients, surgery alone in 18 and a combination in 11.
- All patients have been followed up every 3 months for 2 years, every 6 months for 2 other years and then yearly.
Iliac Wing Wide resection

- Ewing sarcoma in a girl aged 13 resection with composite acrylic reconstruction
Sacroiliac Wide Resection

Girl of 11 with sciatic palsy

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Anterior ring Wall resection

- Boy of 13 with primary metastatic Ewing of anterior ring. Wide resection after long preoperative chemotherapy.

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Periacetabular Ewing with metastases on L4. Resection of all lesions after bidrug induction therapy.
Results

With a median follow up of ten years, the 5 year actuarial event free survival rate for all patients is 31 %; 13 % for primary metastatic patients and 37 % for patients seen with localised disease (p<0.001).

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event free survival rate for all patients is 31%.

37% for patients seen with localised disease (p<0.001).

13% for primary metastatic patients.

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Pronostic factors

In primary localised tumor the major prognostic factors are the adequacy of surgical resection ($p<0.01$) and the high dose intensity of chemotherapy, particularly during the induction ($p<0.05$).

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Influence of local treatment

80% life expectancy and 80 months median survival for patients after wide resection.

(p<0.001).

Patients treated by radiotherapy had 17% life expectancy, and a 13 months median survival.

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Patients treated with radiotherapy had a 44% risk of local relapse. All subsequently died.
Influence of chemotherapy

59% for patients treated with 5 or 6 drugs

15% for patients with 4 drugs or less

(p<0.001).

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Conclusion

- Primary metastatic patients require new approach.
- Early wide resection of the primary and adequate dose intensity of a 6 drugs chemotherapy give best results in pelvic Ewing’s despite large tumoral volume or even incomplete response to preoperative chemotherapy.