

Mesothelioma in children and adolescents: the European Cooperative Study Group for Pediatric Rare Tumors (EXPeRT) contribution

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33 patients < 21 years

Multicystic mesothelioma of the peritoneum – 6 cases

- 5 surgery, 1 CRS-HIPEC – 6/6 alive

Malignant mesothelioma – 27 cases

- first-line treatment: preoperative chemotherapy (14 cases), surgery only (3), chemotherapy only (5), adjuvant chemotherapy (3) or palliative treatment (2)
- response rate to cisplatin-pemetrexed = 50% (6/12 cases)
- hyperthermic intraperitoneal chemotherapy (CRS-HIPEC) in 19 patients (3 upfront, 12 after neoadjuvant therapy, 6 after tumour progression)

5-year EFS 45.1%, 5-year OS 82.3% (median follow-up 6.7 years)

Conclusions:

Paediatric mesothelioma is exceptional and seems to be different from its adult counterpart with few asbestos exposures, more peritoneal primary, and a better outcome.

The cisplatin-pemetrexed regimen showed promising efficacy. Relapses could be salvaged with active therapy including CRS-HIPEC.

Table 1

Characteristics of the population (33 patients).

Clinical characteristics	Malignant mesothelioma	Multicystic mesothelioma of the peritoneum
	Number of patients	Number of patients
Age, year	27	6
Median	13.4	14.1
Range	0.2–18.7	2.2–21.1
Gender		
Male	16	4
Female	11	2
Histological subtype		
Epithelial	21	—
Biphasic	4	—
Unspecified	2	—
Presence of distant metastases	9	—
Primary location		
Peritoneal	18	5
Pleural	5	—
Multiple sites	3	—
Vagina	1	1
Asbestos exposure	1/24 with available information	0/4 with available information

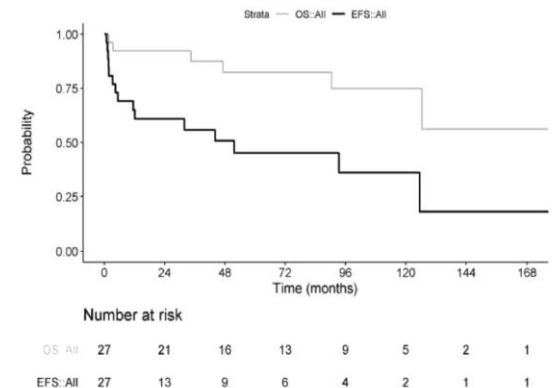


Fig. 2. The outcome of paediatric patients with malignant mesothelioma. OS, overall survival; EFS, event-free survival.