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Articles Based on the Proceedings of a Satellite Symposium held at the 32nd Congress of SIOP, on 4 October in Amsterdam entitled
“Anemia in Pediatric Cancer Patients—How to Manage It?”
and also on the Proceedings of the Pediatric Session of a stand-alone Symposium held on 7–9 September 2000 in Seville, Spain entitled
“Evolving Issues in Oncology: What is the ‘Optimal Hemoglobin Level?’”
P097

CSF LEVELS OF AFP AND B-HCG IN INFANTS: DEFINING A NORMAL RANGE.

S. Kettle, Ch. Nutt, C. Cooke-Yarborough, and J. Coulson
The Children's Hospital at Westmead, Sydney, Australia.

Introduction and Objectives. Approximately 6% of germ cell tumors (GCT) arise within the CNS. These tumors can comprise a wide histologic spectrum making biopsy desirable, however, open or stereotactic biopsy may be associated with unacceptable risk. In this study, the measurement of AFP and B-HCG in serum and CSF may identify the presence of immature germ cell tumors. To date, there are no published reference intervals for AFP or B-HCG in the CSF of infants. We therefore measured CSF AFP and B-HCG in infants aged <4 months who did not have malignancy to determine these reference intervals.

Methods. Methods (n = 10 infants) in CSF were measured by a monoclonal enzyme immunoassay on an AxSYM analyzer. Samples with a >5000 SCM/mL were excluded. Paired plasma samples were obtained from all infants.

Results. B-HCG was present in low concentrations in normal CSF. The limited data showed no variation in concentration with age. Using ages corrected for prematurity, AFP measurements (14 days) showed:

<table>
<thead>
<tr>
<th>Age (days)</th>
<th>Mean (SCF)</th>
<th>Mean (Plasma)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-15 days</td>
<td>20</td>
<td>0.72 (0.36-4.2)</td>
</tr>
<tr>
<td>16-30 days</td>
<td>13</td>
<td>0.95 (0.41-2.8)</td>
</tr>
<tr>
<td>31-60 days</td>
<td>27</td>
<td>3.13 (1.2)</td>
</tr>
<tr>
<td>61-110 days</td>
<td>21</td>
<td>11.4 (2.4)</td>
</tr>
</tbody>
</table>

Conclusion. CSF AFP levels are much lower than plasma levels, and by age six weeks in most infants, the levels are close to those found in adults. Corrected for prematurity, all results at age ≥2 months were <5 μg/mL. These results have implications for the identification of CNS tumors, particularly congenital CNS tumors in infants, containing immature germ cell elements.

P098

EXTRAGONadal GERM cell tumors: Results from AEIOG TCG 91/98 protocols.


1. Dipartimento Materina Infantile, Pavia, Italy
2. Università Politecnica, Pavia, Italy
3. Pediatrica, Modena, Italy
4. Oncologia Pediatrica, Genova, Italy
5. Clinica Pediatrica, Padova, Italy
6. Clinica Pediatrica, Pavia, Italy
7. Unità Pediatrìa, Modena, Italy

Aims of the Study. To analyze the outcome of patients with extragonadal (EG) GCT treated with TCG 91/98 protocols, 45 pts were enrolled: 34 pts were females, 11 males; mean age 17 months (range 1-157 months). Site of the T: scrophococcyg (30 in 37, medianium in 2, retroperitoneum in 2, subcutaneous in 1, parietal in 1, neck in 1, scalp in 1, Stage IV (Sv): 1S IEs pts, 5I Es, 3S III, 29S IV(E). ALEF level was >10000 ng/mL in 19 pts (not measured in 5). Complete (cr) response rate was 40% at diagnosis was performed in 6 pts, partial (p) rate in 9 pts, biopsy only in 30-17 pts underwent delayed surgery (29% in 8 pts). Exitus for progression occurred in 11 pts (2 nos responders, 9 relapsed); in 11 pts, the site of the T was sc in 8, medianium in 2, parietal in 1; 6 pts were in SI III, 5 SI IV; AVE was >10000 mg/mL in 5 surgery at diagnosis consisted of 13 pts, only delay of the T in 9, radiotherapy in 7; delayed relapse, 5 pts of malignant residual was performed in 4.

Conclusions. In TCG 91/98 Protocols, sc and mediastinal T, partialy relapsed, with malignant residue, frequently presented a poor outcome; it is reasonable to suggest the early recognition of resistant cases followed by different chemotherapy regimens, with the aim of obtain complete remission of the T, necessary for cure.