Pediatric occipitocervical instability

Etiology

Skeletal dysplasia

Congenital spinal anomaly

Chronic atlantoaxial rotatory fixation

Posttraumatic instability

Idiopathic degeneration

Postoperative instability.

Cases

Plasmocytoma of C1 in a child

Vertebral involvement is a common occurrence in myelomas, but isolated involvement of the high cervical spine is exceptionally rare. This factor, together with the pediatric age of our patient, makes this case the first report of a plasmocytoma involving C1. CASE REPORT:

A 14-year-old boy, without neurological involvement, presented with cervical pain and a palpable posterior neck mass. Cervical spine radiographs showed an osteolytic lesion at C1 compressing the cervical spinal canal and instability of the craniocervical junction. After a complete study, the patient was diagnosed with solitary plasmocytoma. A sequential treatment was instituted that consisted of radiotherapy after craniocervical junction stabilization with an halo-jacket, followed by occipitocervical stabilization with instrumented arthrodesis that was accompanied by resection of the residual C1 tumor and, finally, with consolidation of the oncological treatment with further radiotherapy.

The treatment of choice for a cervical solitary plasmocytoma consists of a combination of chemotherapy, corticosteroids, radiotherapy, and immunotherapy, but the main neurosurgical problem is the craniocervical instability as occurred in other tumor of the cervical column [1)]

Treatment

See Occipitocervical fusion in pediatric patient

1)
Miranda AD, Rivero-Garvía M, Mayorga-Buiza MJ, Pancucci G, Valencia-Anguita J, Márquez-Rivas J. Plasmocytoma of C1 in a child. Case report. Childs Nerv Syst. 2014 Jul 10. [Epub ahead of print] PubMed PMID: 25008125.