

SUMMARY AND CONCLUSIONS

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The aim of this work was to study the incidence of atlanto axial subluxation in JRA.

This study include 30 patients suffering from JRA diagnosed according to the American rheumatism association and exclusion criteria for JRA.

All patients were subjected to full history taking, complete clinical, neurological examination and some laboratory investigations :

- 1- Haemoglobin gram %.
- 2- Erythrocyte sedimentation rate (ESR).
- 3- Latex fixation test for rheumatoid factor.

Plain X-ray was done to all patients with JRA to detect atlantoaxial subluxation. Lateral view was done with maximum flexion and extension to detect atlanto axial interval which measured between the anterior surface of the odontoid process and posterior surface of anterior arch of atlas vertebrae.

Atlanto-axial subluxation occurs if the interval is more than 4.5 m.m. and there may be one millimeter difference between extension and flexion.

According to this study AAs occur in systemic and poly articular onset and occur in males more than females with long duration of the disease.

There were 27 patients complained of occipital pain, 11 cases were systemic and 15 cases poly articular and one case was pauciarticular onset.

Radiological examination revealed that 10 cases have atlanto axial subluxation, 2 cases have stepladder affection and one case has fusion of the apophyseal joints from C3 to C6. Neurological examination of these 10 cases revealed that there were limitation of movement in one case, while torticollis in another case.

Sensation were normal in 6 cases while 4 having hyperesthesia hyper-reflexia were found in 2 cases while normal reflexes in 4 cases and 4 cases there reflexes were diminished.

Reduction of synovitis is the corner stone of non surgical management of cervical spine while the remaining treatment is symptomatic.

Soft collar are used for psychologic support, pain relief, warmth and a feeling of stability while a rigid collares are used to limit atlanto axial motion more than soft collar.

Intermittent cervical traction is also used for reducing atlanto axial subluxation but not correct

myelopathy. Presence of severe pain and neurologic manifestation are the indications of surgical management.

So we recommend to do early plain X-ray to cervical spine in flexion and extension for all patients suffering from JRA to detect any changes in the cervical spine.

Finally we can conclude that radiological examination of the cervical spine of the 30 patients with JRA revealed that:

- AAS were detected in 10 patients of systemic and poly articular onset. They were 7 males and 3 females. All of them were seronegative and complained of pain in the occiput.
- 2 cases showed stepp-lodder affection of the cervical spine - Only one case showed fusion of the apophyseal joints from C3 to C6.
- These changes may accompanied with some neurological manifestation such as parasthesia, vertigo, limitation of cervical movement, torticollis and abnormal tendon reflexes. So we advice to do early radiological examination of the cervical spine in all patients with JRA, This will help us to detect any changes in cervical spine and to give the proper management whether physical, medical or surgical according to the severity of the case and so we can prevent the possible complications.