

Grisel's Syndrome: Challenges In Diagnosis And Role Of Conservative Management

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INTRODUCTION:

Grisel's syndrome is defined as a nontraumatic atlanto-axial rotatory fixation (AARF) preceded by otorhinolaryngology infection. We report a case of a 9 year old girl with neck pain and stiffness for 5 weeks diagnosed as Grisel's syndrome via MRI.

MATERIALS & METHODS:

She presented with neck pain and inability to move her neck upon awaking from sleep. She had no preceding trauma or infection. Outpatient doctors treated her twice with analgesics. After 5 weeks of non-resolving symptoms she was seen by Orthopaedic team. On examination, her head was rotate, tilted to the left with left sternocleidomastoid spasm and tenderness. Nonetheless, patient could still flex and extend her neck. No signs of otorhinolaryngology infection or cervical lymphadenopathy. Cervical xray showed C1C2 subluxation. CT cervical showed AARF Hawkins type II. She was treated inpatient with analgesics, muscle relaxants and Halter traction increased from 1.8kg gradually to 3.12kg. Eventually, MRI cervical done showed AARF, enlarged palatine and adenoid tonsils with multiple cervical lymph nodes leading to diagnosing Grisel's syndrome.

Patient was initially offered halo vest however, her parents refused invasive procedure. Hence, Halter traction was applied for 3 weeks resulting in complete regression of symptoms. She regained full range of movement of neck with no tenderness. No recurrence seen at 3rd month follow-up. Patient is still followed up to monitor recurrence.

DISCUSSIONS:

Grisel's syndrome is a common cause of nontraumatic AARF. In this case, definitive diagnosis was only made via MRI as CT could not identify presence of infection. Despite delayed presentation, we successfully reduced it conservatively via Halter traction.

CONCLUSION:

Previously there was lack of suitable algorithm for conservative treatment. Now conservative treatment is an imperative option even in delayed presentation. MRI can be a complementary diagnostic tool for Grisel's syndrome.



Legend 1: MRI Cervical

Legend 2: Xray Cervical

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