MUMMY, I CAN'T MOVE MY HEAD !

Nurul Akmal bt Mustafa, Lee Kee Choon, Dayang Rafidah bt Awang Habeni, Sazwan Reezal Shamsuddin

Emergency & Trauma Department, Hospital Sultan Haji Ahmad Shah, Temerloh, Pahang, Malaysia

INTRODUCTION

Neck pain is a common presentation in pediatric age group to emergency department. A broad spectrum of differential diagnosis ranging from benign to life threatening or traumatic versus atraumatic may present as neck pain. These include some less common causes like cervical intramedullary tumor, cervical discitis or intradiscal calcification [1].

CASE REPORT

7-year-old girl presented with 4 days history of neck pain which cause child to have torticollis (Figure 1). It was preceded by 3 weeks history of intermittent fever and upper respiratory tract infection. Otherwise child has no history of trauma, and no changes of voices and no difficulties in taking orally. Examination of the throat was insignificant. Plain radiograph shown loss of cervical lordosis and increase prevertebral space at C2-C3 level (Figure 2). Subsequently computed tomography (CT) scan of cervical spine demonstrated atlantoaxial rotatory subluxation (Figure 3) and contrasted CT revealed retropharyngeal collection extending to the prevertebral space at the left nasopharynx to oropharynx as well as over the right nasopharyngeal regions (Figure 4). She was diagnosed as Grisel's syndrome and was given a course of antibiotics.

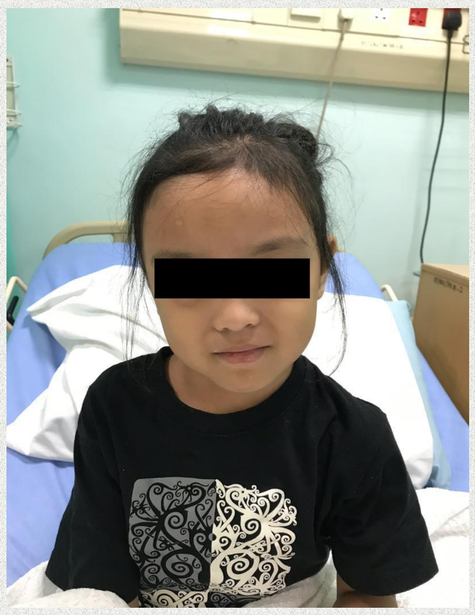

Figure 1: Child with torticolis

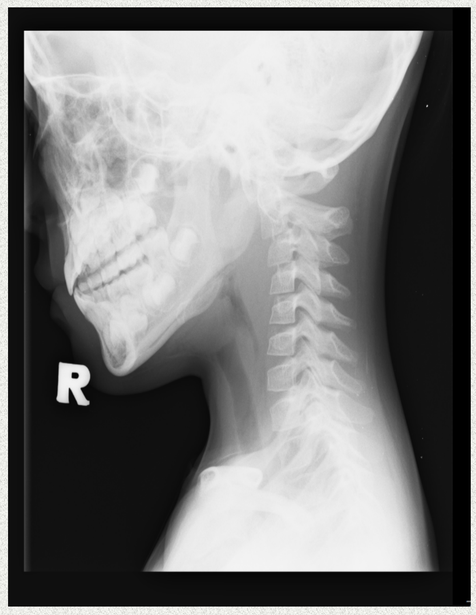

Figure 2: Cervical spine plain film

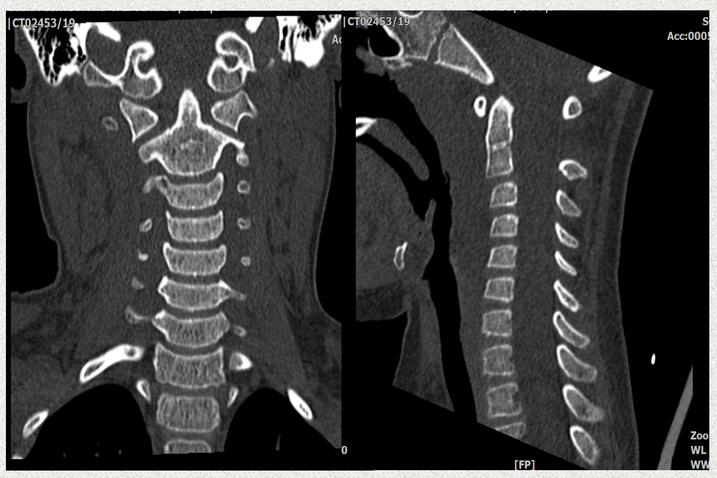

Figure 3: Plain CT Cervical of patient (sagittal & coronal view)

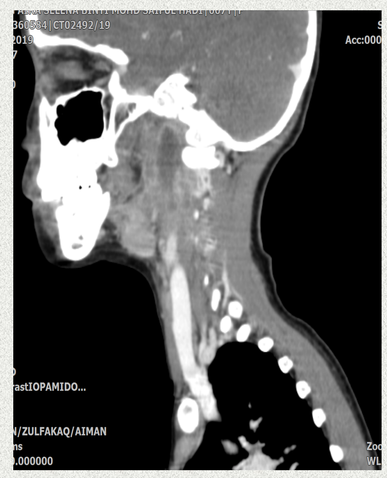

Figure 4: Contrasted CT Neck of patient (sagittal view)

DISCUSSION

Retropharyngeal abscess are deep space infections that have potential deteriorate and have life threatening airway obstruction. The peak incidence occurs between 3 and 5 years of age, before the lymph nodes in the potential space atrophy, making abscess formation much less common with age [2]

The diagnosis of paediatrics retropharyngeal abscess can be difficult given variant of nonspecific signs and symptoms including neck stiffness, reduced oral intake, drooling of saliva, fever, malaise, odynophagia and possible external neck swelling [2]

In this case, the possible infection spread from the tonsil to the danger space of the retropharyngeal space. Due to the close proximity of the spinal accessory nerve with the retropharyngeal & parapharyngeal space, pathology in this area will indirectly affect the sternocleidomastoid and eventually leads to torticollis.

Radiological cervical spine interpretation can be challenging too due to wide range of normal anatomical variants and synchrondoses. Particularly variants to familiarize with plain film interpretation include pseudo-subluxation of C2 on C3, prevertebral soft tissue widening and the pseudo-Jefferson fracture[3]

Apart from that, this case has also brought our attention to Grisel's syndrome, a rare condition that usually affect children. 15% of this condition typically present with torticollis and can be accompanied by neurological including bladder dysfunction, limb weakness and respiratory failure.[4]

Most of the causes of this syndrome are due to local infection (48%) or post adenotonsillectomy (31%).[5] Prompt treatment is needed in order to prevent neurological sequelae.

This case also highlights the importance of careful assessment of neck pain in pediatrics to prevent delay in less common diagnosis but with serious consequences. The clinical features described in the history and examination should raise some degree index if suspicion of more serious and less common cause of neck pain in pediatrics.

CONCLUSION

Grisel's syndrome needs to be taken in to consideration in paediatric patient who presented with non-traumatic painful torticollis with suggestive history of upper respiratory tract infection. Early diagnosis and intervention are critical for prognosis of Grisel's syndrome.

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EMAS MEETING 2019

PP118