CASE 5

6 Y/O BOY

Brief history

- Past history
 Facial asymmetry and plagiocephaly
- Chief complain
 Asymmetrical head position

Imaging studies

Cervical plain films (2020.06.15)

C-spine CT (no C) (2020.06.12)

C-spine MRI (no C) (2020.06.15)

Imaging findings

- ✓ Radiographs:
 - Suspect C1-C2 instability

• MRI:

- Increased atlantodens interval with minimal joint effusion collection
- Abnormal fusion of atlas and occipital skull (more on R't side)
- Rotational subluxation

Differential Diagnoses

Incomplete atlanto-occipital assimilation

Atlanto-occipital assimilation

- Fusion of the atlas (C1) to the occiput
- One of the most common osseous anomalies observed at the craniocervical junction
- Complete: C1 not identifiable
- Incomplete: C1 partially identifiable
- Other findings :
 - Fusion of C2 and C3 (occurs in 50% of cases)
 - basilar invagination: type 1
 - cleft palate
 - cervical ribs

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Thank you for your attention