

# Case Study-MR 750W

## T2 CUBE PROMO(Prospective motion correction)

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Imagination at work.



# History and clinical presentation

## Patient History-

13 y boy with complaints of swelling over the right cheek and palate.

H/o allergic rhinitis. Nasal block.

High mucosal discharge and immobilization is quite difficult for this patient.



# Imaging Outcome-CUBE T2 With out PROMO

SAG CUBE T2



COR CUBE T2 Reformat



AXIAL CUBE T2 Reformat



Because of the motion lot of ghosting artifacts and this images are not diagnostic

# CUBE T2 With PROMO 3D High Resolution Motion Corrected Images

SAG CUBE T2



TR-3000  
ST-1.4mm  
Matrix 288\*288  
2.52min  
BW 83.3kHz

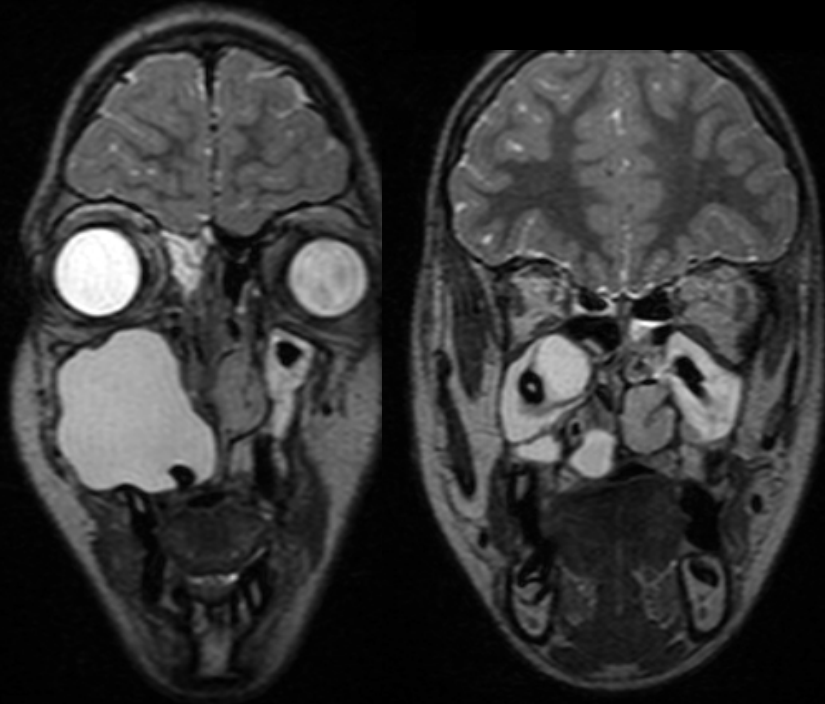


Thanks to PROMO, navigator tracks the head and corrects motion artifacts

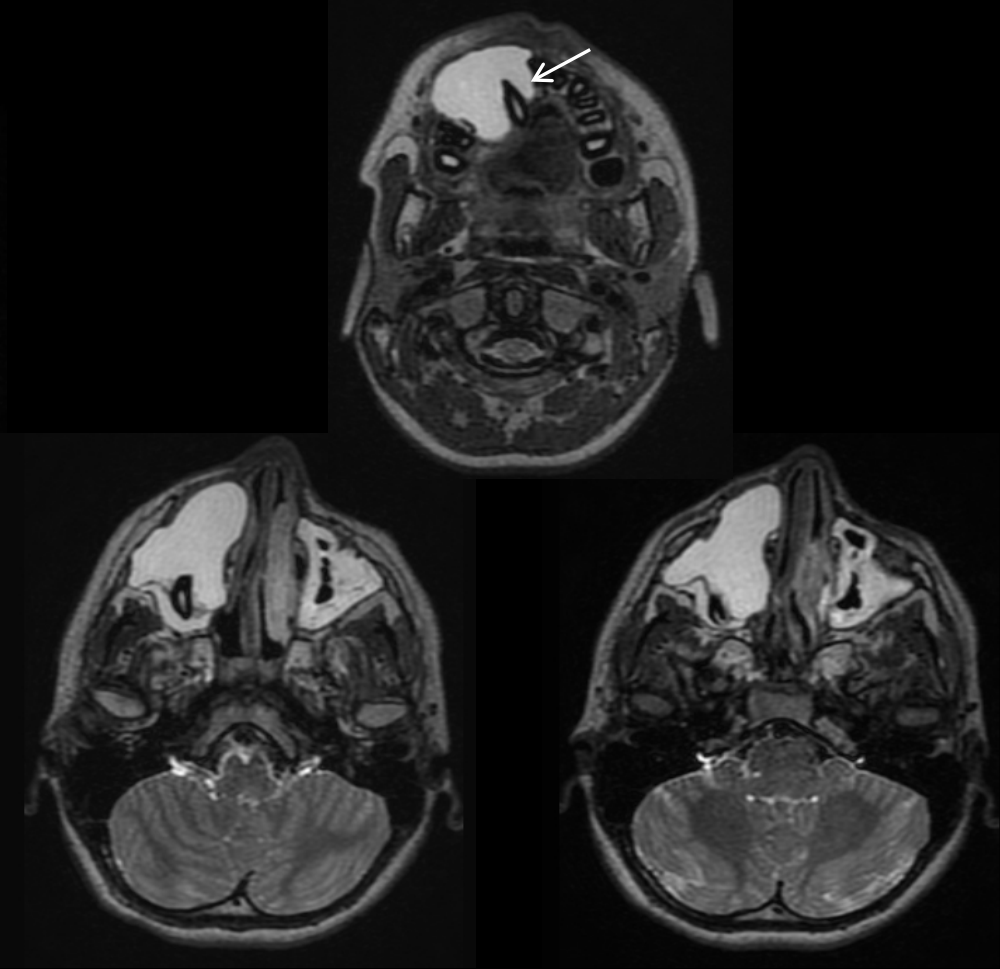
The crown of two teeth are seen within the lesion



COR CUBE T2 Reformat



AXIAL CUBE T2 Reformat



# Study Conclusion

## Diagnosis:

- T2 hyperintense lesion is seen arising from the right upper canine tooth level extending into the maxilla. Superiorly the lesion extends up to the inferior wall of right orbit. The crown of two teeth are seen within the lesion
- Dentigerous cyst



## Uniqueness of this application/imaging method

- A 3D FSE based application that uses a long echo train and modulated flip angles to reduce scan time, SAR, and flow related artifacts.
- Sag CUBE T2 Combined with PROMO (prospective motion correction), navigators track head motion to reduce motion artifacts during imaging.
- Potentially reduce sedation rates in pediatric, scared, confused patients.



