Update on Rhinosinusitis

The Auckland Regional Health Pathway on Rhinosinusitis

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Rhinosinusitis update

* Rhinosinusitis =inflammation of the paranasal sinuses and nasal cavity
* Acute Rhinosinusitis (ARS) =duration <12 weeks
* Chronic Rhinosinusitis (CRS)=duration >12 weeks
* Aetiology and management are quite different between ARS and CRS

ARS

* usually triggers by viral URTI, classified as
  * Acute viral rhinosinusitis
  * Acute post-viral rhinosinusitis
  * Acute bacterial rhinosinusitis
    * Strep pneumonia, Haemophilus influenza, Moraxella catarrhalis

ARS diagnosis

* Acute viral URTI with nasal blockage or congestion or discharge, plus one of:
  • facial pressure or pain or headache
  • reduced smell
  • cough (children)
* Fever, purulent secretion, severe local pain —> bacterial

ARS management

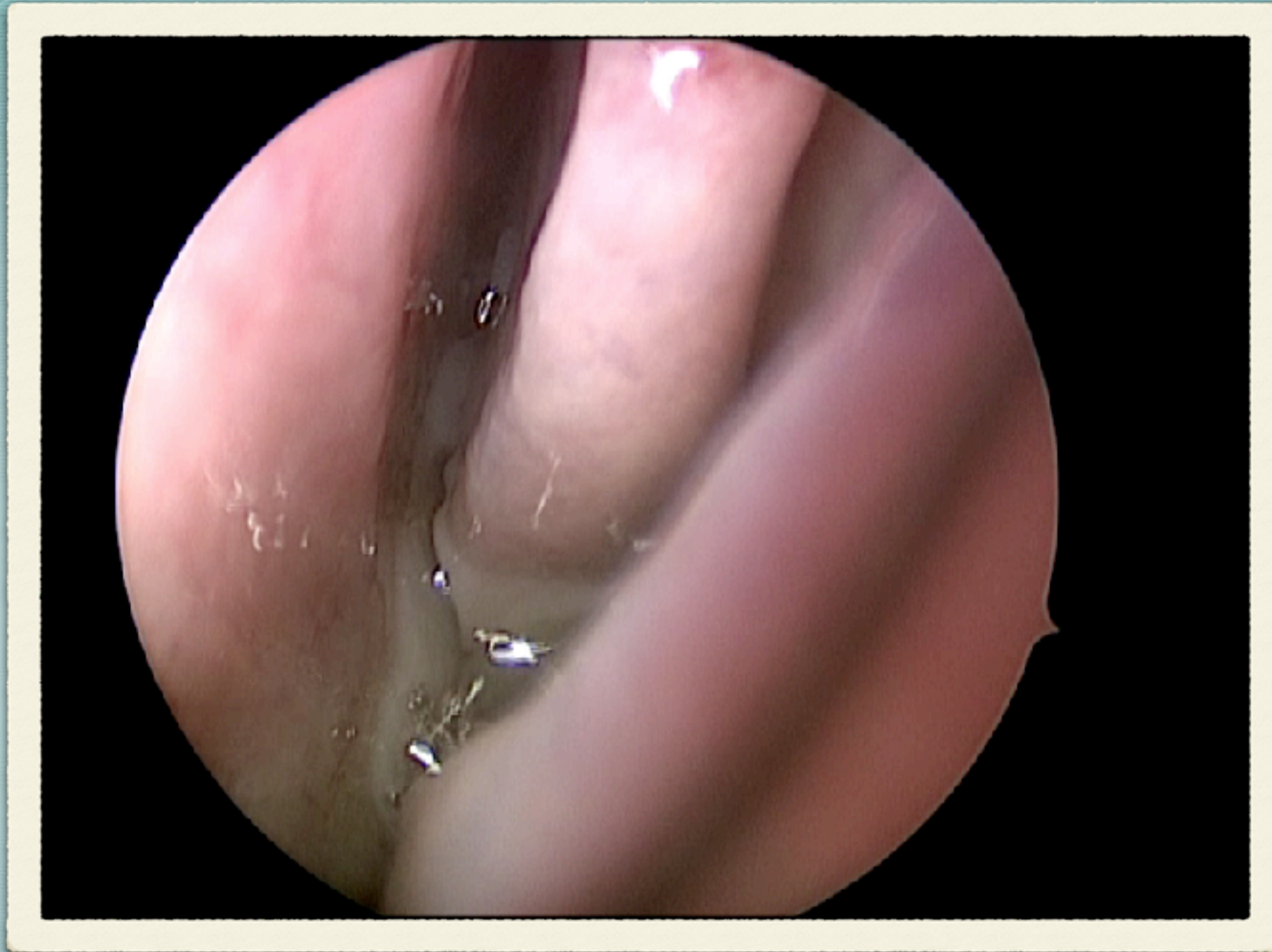
* Mild ARS lasting <5 days:
  * symptomatic relief: analgesia, saline irrigation, decongestants
* Post-viral ARS persist >10 days or worse after 5 days of mild ARS:
  * as above + topical steroid; consider bacterial
* Bacterial ARS:
  * symptomatic relief + topical steroid + oral antibiotics
  * Oral steroid if know CRS

ARS management

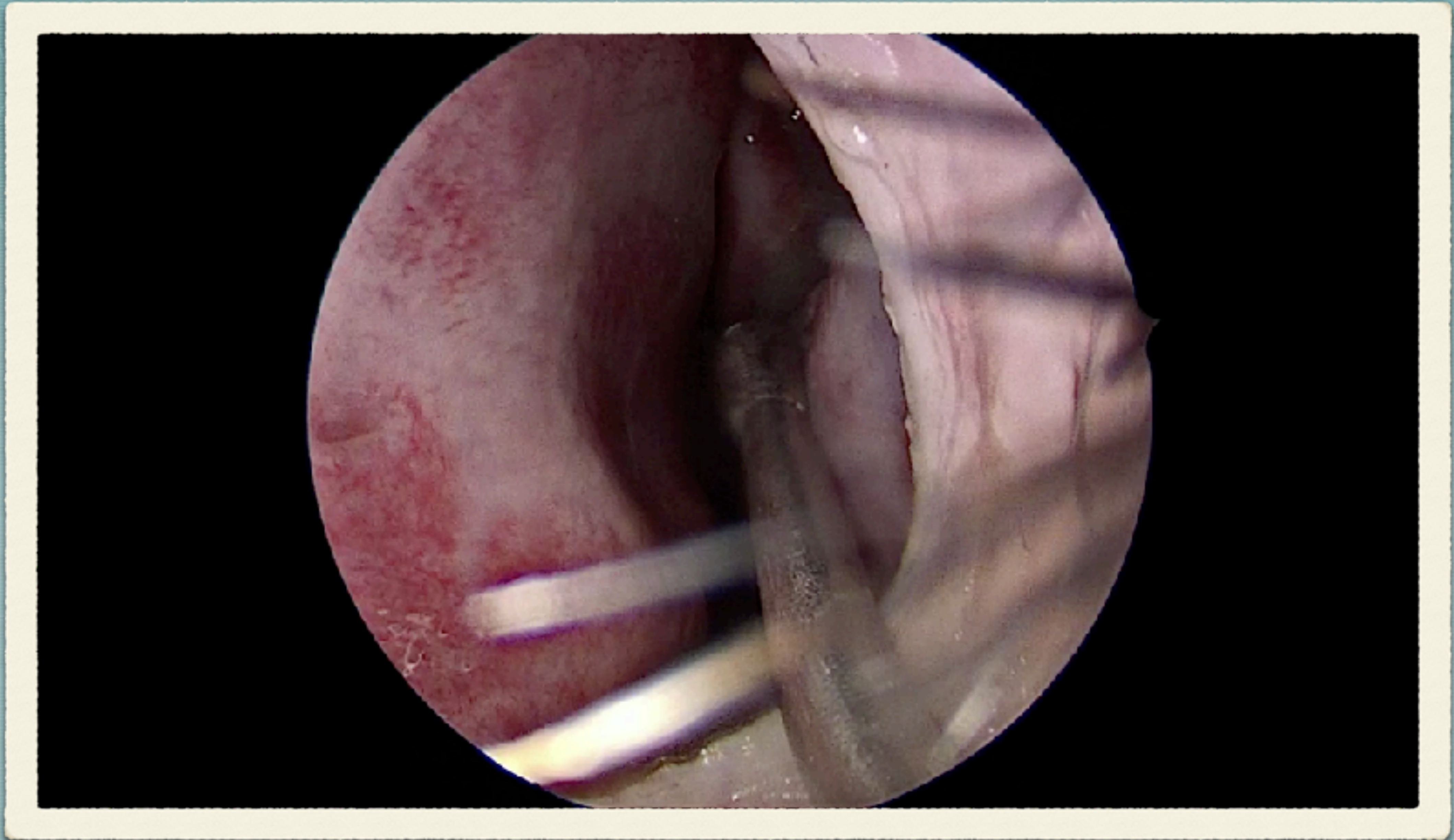
* Symptomatic relief
* Antibiotics
* Surgery only for complication such as orbital abscess, intracranial extension, osteomyelitis

CRS

* CRS is an inflammatory condition invlcoing the paranasal sinuses and the linings of the nasal cavity that lasts for >12 weeks
    - may follow ARS
    - association with adult onset asthma
    - divided into with or without polyposis
    - paediatric population with polyposis is rare, consider CF



CRS without P



CRS w P

CRS diagnosis

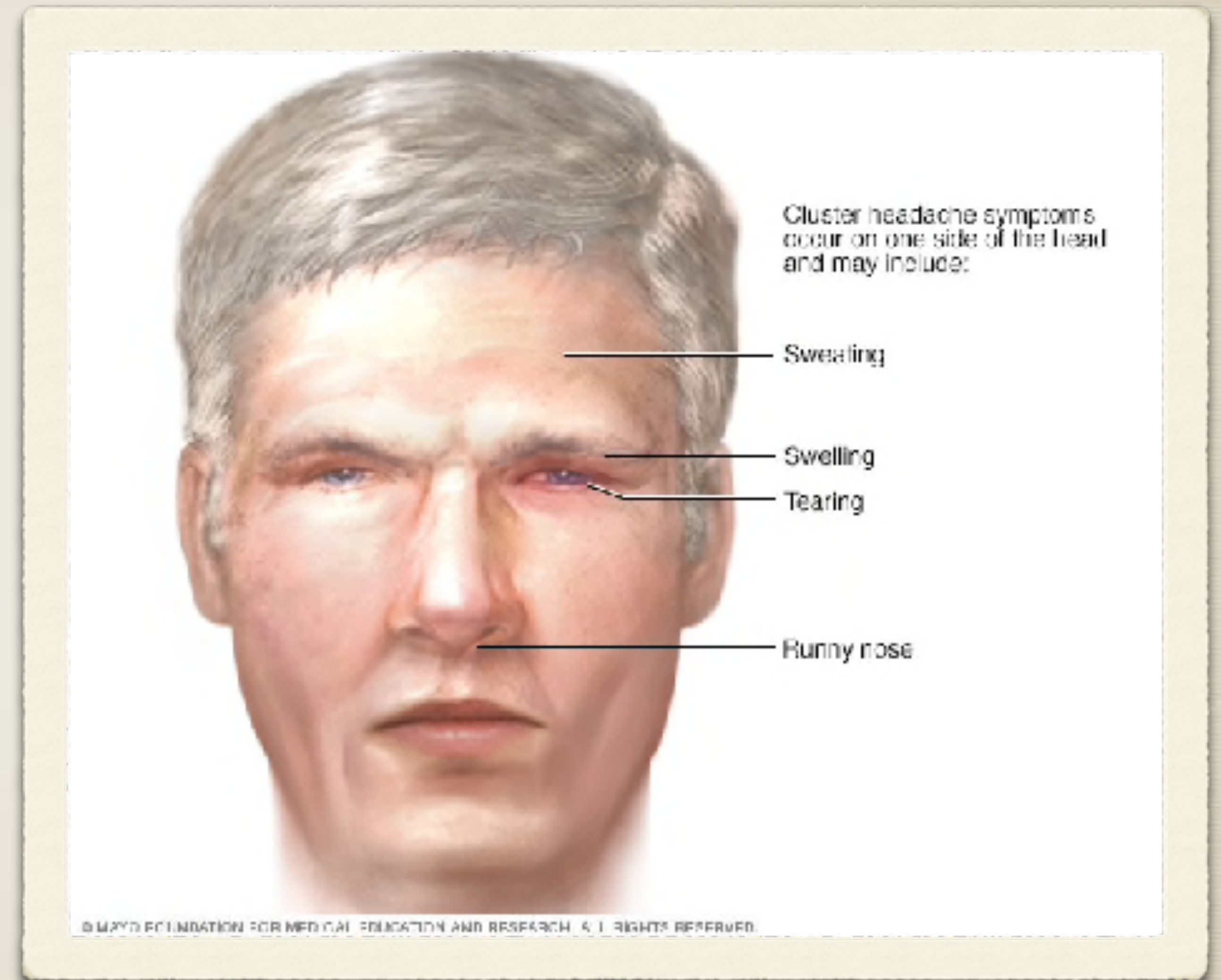
- >12 weeks with symptoms of ***nasal obstruction/congestion*** and/or ***nasal discharge*** (MUST have one of these symptoms), plus one of:
  - facial pressure or pain
  - reduction or loss of smell (adult)
  - cough (children)
- Clinical findings with inflamed mucosa, muco-pus, polyposis OR
- CT findings

Getting a CT in DHBs

* Direct referral to ENT without CT scan is unlikely to be accepted.
* Referral to ENT often declined due to insufficient clinical information and no CT scan
* State symptoms of CRS and document trail of medical therapy (4 weeks)

Mid-segmental facial pain

* common condition, often confused with rhonisinusitis
* soft tissue tenderness and pain
* migraine and cluster headache
* minimal nasal symptoms



CRS management

1. Modify and treat any underlying causes
2. Education and compliance
3. Medical management
4. Surgery
5. Long term management
6. Manage acute/recurrent exacerbation

1/ Underlying cause

* Allergic rhinitis
* Adult onset asthma
* Smoking and passive smoking
* Irritants and pollutants
* Immunodeficiency
* Viral infection
* Systemic disease
* Dental infection

2/ Education

* CRS: complex inflammatory disorder rather than a simple infectious process or anatomic problem
* recovery of normal mucociliary function may take months (medical or surgical treatment)

3/ Medical management

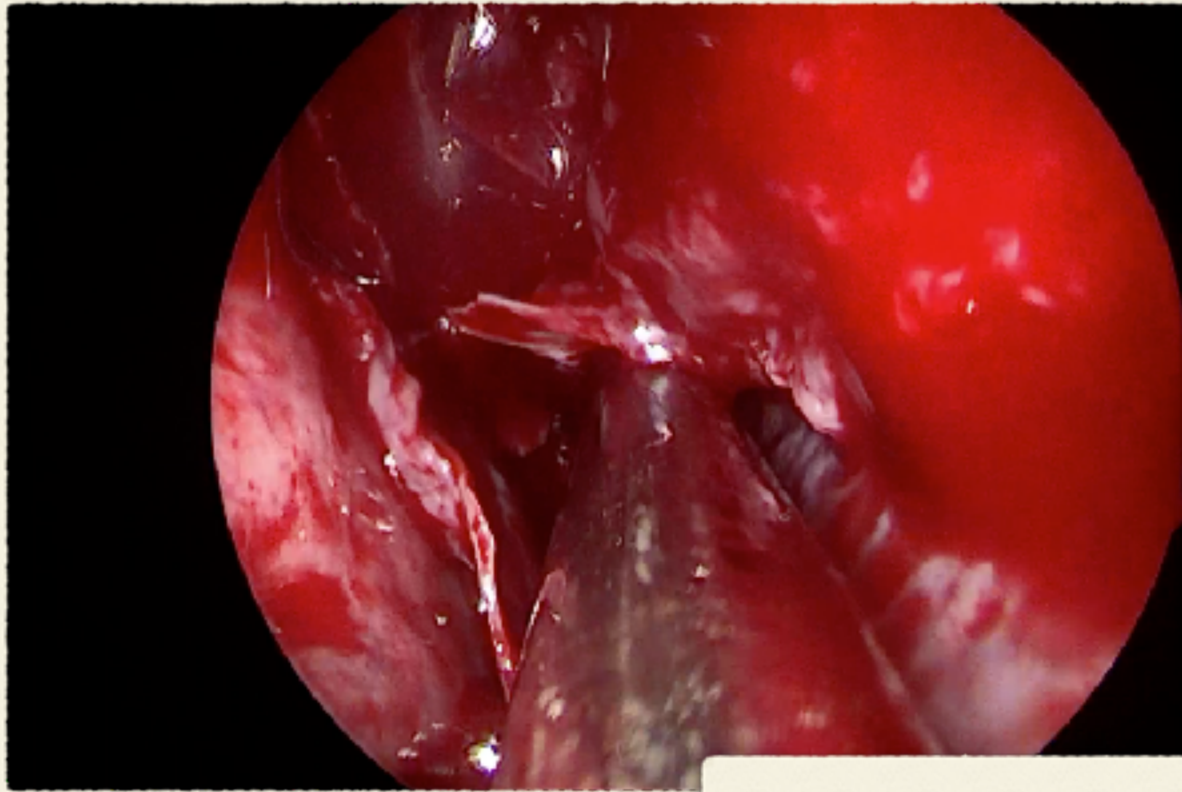
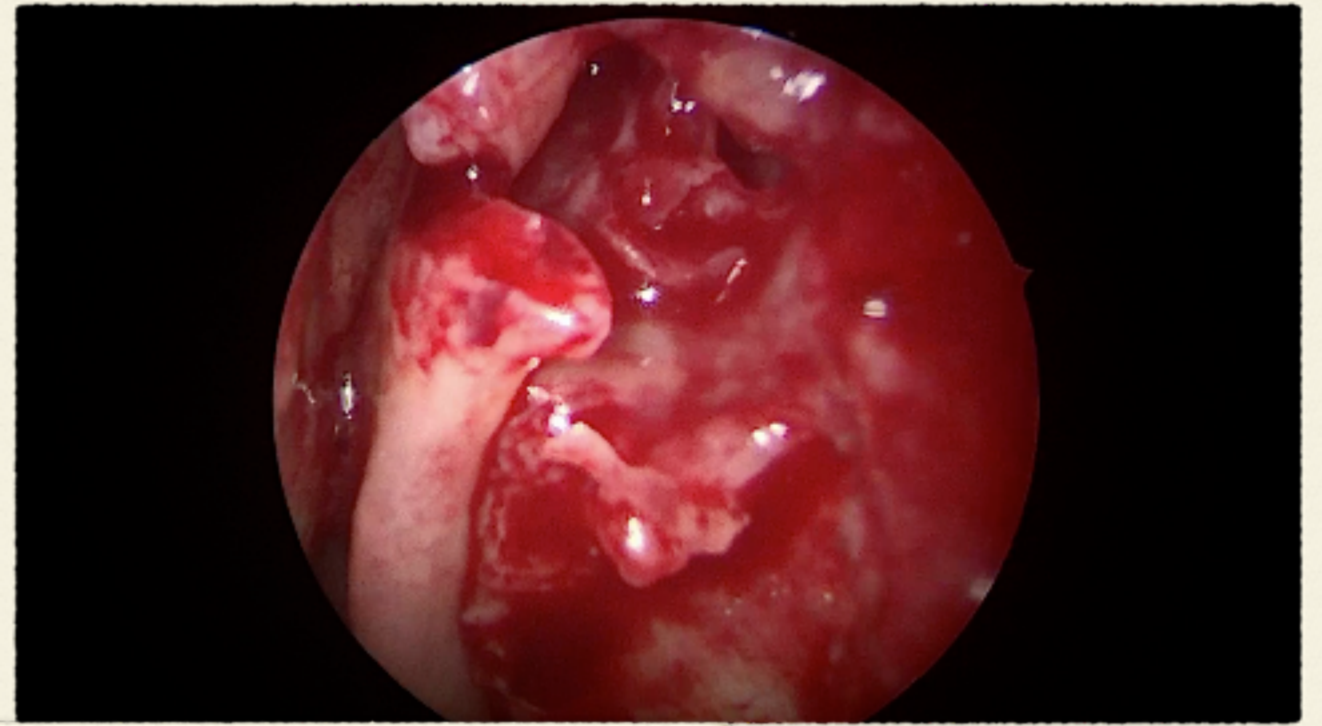
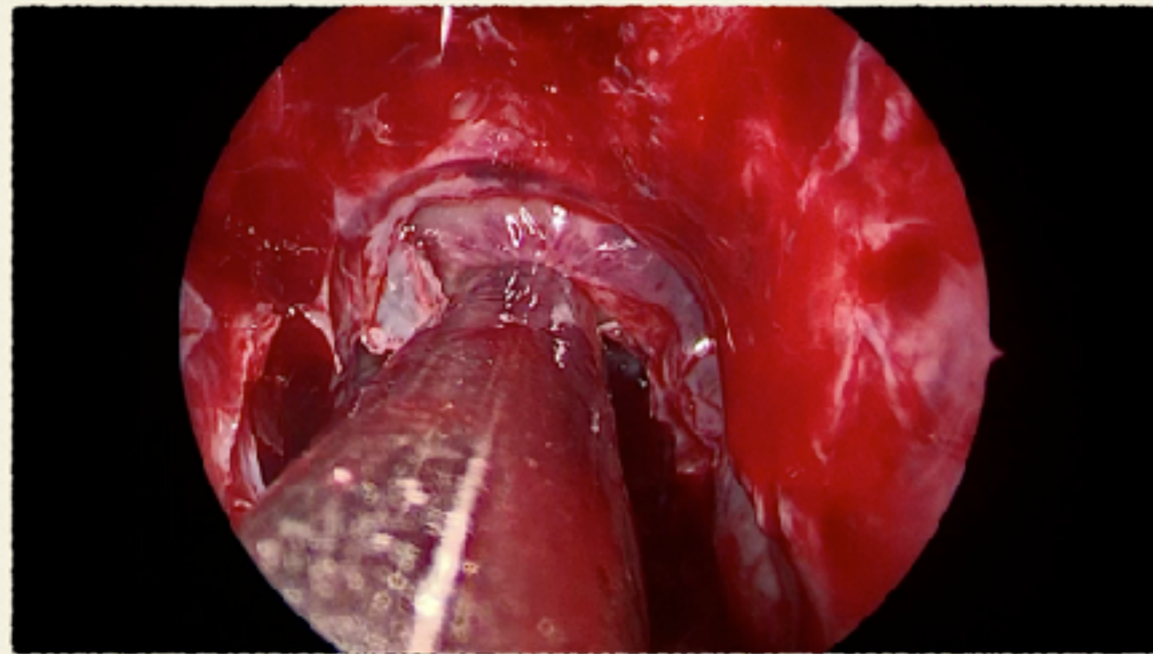
* Nasal irrigation
    * reduce post-nasal drip, remove secretion, rinse away allergens and irritants
    * use before topical steroid
* Topical Steroid
    * beneficial in both ARS and CRS
    * full response may take a week
    * important long term (with/without Surgery)
* Review in 4 weeks and if no improvement…

3/ Medical management

* Oral antibiotics
    - Doxycycline 100mg OD for 3 weeks (medical polypectomy)
    - Macrolide (Roxithromycin) 150g OD for 4-6 weeks
* Oral Steroid
    - *30mg* po od one week, *20mg* po od one week then *10mg* po od one week
* if failure to medical management.....

4/ Surgery

* Surgery attempts to restore sinus ventilation and drainage, help resolve mucosal disease
* Surgery must be followed by medical management to control inflammatory process, otherwise symptoms will return!
* Increasing evidence to suggest early surgical intervention has better long term outcome

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5/ Long term management

* Continue long term sinus irrigation
* Continue topical nasal steroid
* Important post surgery

6/ Recurrent/acute exacerbation

* Medical treatment with oral steroid and oral antibiotics
* Topical irrigation and nail spray
* Surgery/ revision surgery

Summary

* https://aucklandregion.healthpathways.org.nz/
* early management of CRS leads to better outcome
* education and long term management leads to less recurrence of disease

Waitemata District Health Board
Best Care for Everyone

ENT Group
Ear Nose & Throat

Greenlane
Medical Specialists

Thank you

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