



# \* ENT Update for GPs

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\* AOM/OME - still the most common reason for ENT referral

\* **Definition:**

\* Although considered a continuum of disease, *Otitis Media* can be sub-classified as:

1. **Acute Otitis Media (AOM):** *Middle Ear Effusion* WITH signs and Symptoms of *Acute Inflammation* < 3/52 duration (*i.e. previously normal ear*)

\* **Acute Suppurative Otitis Media (ASOM):** as above.... Caused by an *infective organism*.

\* **Recurrent AOM:** ≥ 3 AOMs in a 6/12 period

2. **Chronic Suppurative Otitis Media (CSOM):** as above lasting > 3/12

3. **Otitis Media with Effusion (OME):** *Middle Ear Effusion* WITHOUT signs or symptoms of *Acute Inflammation*

\* **Ears - AOM / OME**



\* History / Examination / Investigation: No Update

\* Treatment:

\* Impact of *Pneumococcal Vaccine*

\* Aim of Vaccine: to ↓↓ Childhood AOM incidence

\* Impact of Vaccine: *USA Experience - PCV7 introduced 2000:*

\* Overall:

\* Marked ↓↓↓↓ in Serious Disease has occurred with use of *newer pneumococcal Vaccines*

\* Only SMALL Relative Risk ↓ of 7.8% in AOM

\* 24% ↓↓ in *Treatment Failures and Persistent AOM*

\* Disease Specific

\* ME Cultures:

\* ↓ ME culture of *S. pneumoniae*

\* ↑ ME culture of *Non-Vaccine Serotypes* of *S. pneumoniae*

\* ↑ ME Culture of *Haemophilus Influenzae*

\* No Change in Penicillin non-susceptible strains in *Vaccine vs Non-vaccine serotypes*

\* NP Carriage Rates:

\* ↓ *Strep. Pneumoniae Vaccine Serotype* carriage rate

\* ↑ *Strep. Pneumoniae non-Vaccine Serotype* carriage rate

\* ? ↑ Antibiotic-resistant strains

\* Ears - AOM / OME

\* Treatment of AOM:

1. Antibiotics:

i. 1<sup>st</sup> Line:

- \* Amoxicillin 45mg/kg/day
- \* Penicillin Hyper-sensitivity: Cefaclor 10mg/kg, o, tds

ii. 2<sup>nd</sup> Line:

- \* Amoxicillin 80-90 mg/Kg/day (high dose)
  - \* higher dose overcomes the Penicillin Binding Protein resistance of *S. pneumonia*
- \* Amoxicillin + Clavulanate 22.5 + 3.2 mg/kg , o, tds
  - \* Clavulanic acid overcomes the *B-lactamase* resistance of *H. influenzae* or *M. catarrhalis*

iii. 3<sup>rd</sup> Line:

- \* Ceftriaxone 50-75mg/kg/day, IV in 1-2 doses
- \* Clindamycin 10-30mg/kg/day o in q8h doses

\* Duration: 5 - 10 days

\* 10 days:

- \* Fewer early treatment failures with 10 day course,
- \* But increased expense and ? resistance

\* Ears - AOM / OME

**\*Treatment:**

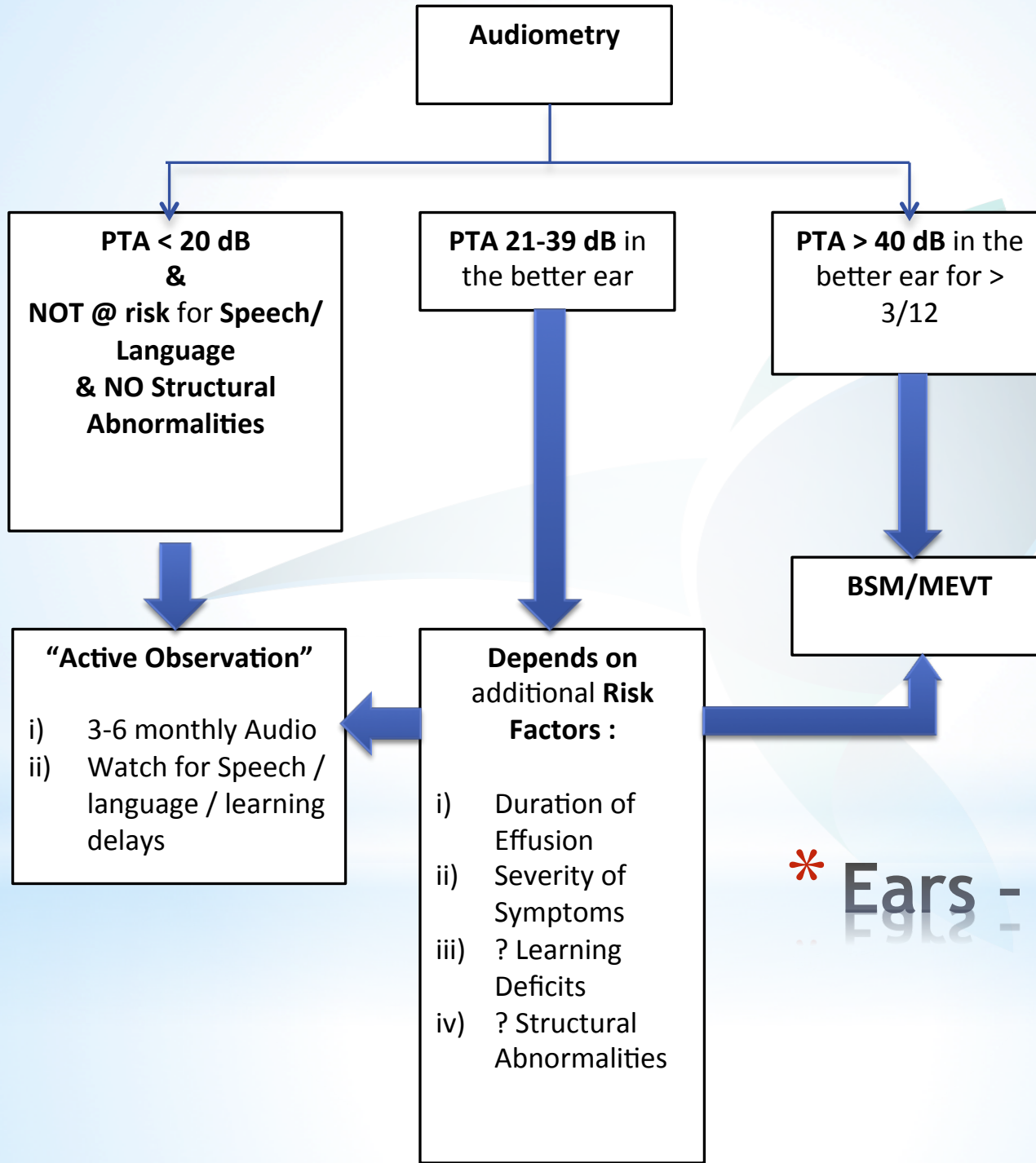
- 2.** Analgaesia
- 3.** Decongestants /Anti-histamines - Not recommended as no evidence of benefit
- 4.** Steroids - Not recommended as equivocal evidence

**\*Ears - AOM / OME**

## \* Indications for Grommets

1. AOM with Complications
2. AOM with cranio-facial abnormalities
3. ROM
  - i.  $\geq 3$  episodes in 6/12
  - ii.  $\geq 4$  episodes in 12/12
4. OME - see next slide
5. (patients requiring Hyperbaric O<sub>2</sub> therapy)
6. Chronic Eustachian Tube Dysfunction / Retraction pockets

\* Ears - AOM / OME



\* Ears - AOM / OME



\* **History:** Onset / Trauma / Recent Illness / Pain / Other Neuropathies

\* **Examination:**

**1.** Facial nerve exam: Side / Bilateral (2%) / Complete (70%)

**2.** Full ENT Exam - *esp.*

**i)** Ear Exam

**ii)** Other Cranial Nerves: weaknesses found in >50% of *Bell's Palsy (!!!)*

\* **Investigation:**

**1.** Audiogram

**2.** Electrophysiologic Testing

**3.** Imaging - MRI with gad

\* **Ear - Bell's Palsy**

## \* Treatment

### 1. Eye Care:

- i) Ophthal Review
- ii) Sunglasses during day
- iii) Close eyelid @ night - *e.g. Tape*
- iv) Artificial Tears
- v) +/- Eye Chamber

### 2. Speech / Dietetics:

### 3. Steroids:

- \* **STRONG** evidence for Benefit
- \* Onset of Treatment: ideally within 3 days of Symptom onset; up to 14 days
- \* No consensus on Dose & Duration
- \* ***Prednisolone 1mg/Kg Body Weight/o/daily*** reducing over 10-14 days

### 4. Anti-virals

\* Ear - Bell's Palsy

\* Prognosis/Recovery:

\* Complete Recovery in 80-90%; up to 12 months

\* Poor Outcome Prognostic Factors:

a. Complete paralysis

b. Age > 60

c. Diabetes

d. Hyper-acusis

e. Severe Pain

\* Recurrence: 10% of cases

\* Ear - Bell's Palsy



\*Ear - Bell's Palsy



\* **Definition:** *VZV Related Neuritis* involving **CN VII & CN VIII**, and a vesicular rash.

\* **Epidemiology:**

\* **Aetiopathogenesis:**

\* Reactivation of Latent **VZV** within the **Geniculate Ganglion**.

\* Due to intercurrent stress or illness

\* Inflammatory/Oedema **PLUS** direct cytopathic effect

\* **Ear - Ramsay Hunt Syndrome**



## \* History:

- \* Past History Chicken Pox / VZV
- \* More likely **Severe pain** than with *Bell's Palsy*

## \* Examination:

### 1. Facial Nerve Weakness

### 2. Vesicles:

- Onset:
  - Mostly concurrent with *Paralysis*
  - **25%** of cases - precede the *Paralysis*
- Distribution: *Pinna / Post-auricular / EAC / Face / Mucous Membrane / Palate.*

### 3. Ocular Complications: *Herpes Zoster Ophthalmicus*

### 4. Hearing Loss / Vestibular Disturbance

- 25% of patients

# \* Ear - *Ramsay Hunt Syndrome*

Right Trigeminal VZV



Right Trigeminal VZV



\* Ear - Ramsay Hunt Syndrome





\*Investigations:

1. Audiology: *SNHL*
2. Serology: Rising *Anti-VZV Antibody* Titres

\*Treatment:

1. Corticosteroids
  2. Anti-Virals
- \* Lessens Pain, Promotes resolution of *Vesicles*

\* Ear - *Ramsay Hunt Syndrome*

\* Prognosis:

**i)** Facial nerve

- \* Worse than *Bell's Palsy*
- \* 30-50% incomplete recovery

**ii)** Vestibulo-cochlear

- \* Complete Recovery: 68% of children, 38% of adults

\* Ear - *Ramsay Hunt Syndrome*



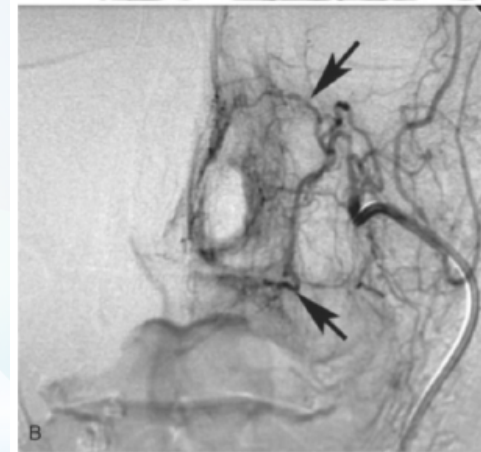
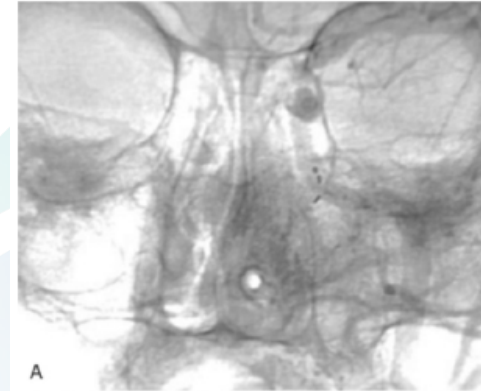
- \* **History:**
- \* **Examination:**
  - \* Anterior Rhinoscopy
  - \* Nasendoscopy: All persistent/Chronic Epistaxis
- \* **Investigations:**
- \* **Treatment:**
  - \* ABCs
  - \* Local: Pressure, Cautery, Cream, Ointment, Dressing
  - \* Systemic: BP Control, Anti-platelet/Anti-thrombotic reversal,
  - \* Specific Conditions: *e.g. Hereditary Haemorrhagic Telangiectasia - pKTP Laser, Tamoxifen PO, Avastin® Topical*
- \* **When to refer:**
  - i) Refractory Acute Bleeding
  - ii) Recurrent/Chronic Bleeding despite max conservative Rx
  - iii) Concern Local or Systemic Underlying Cause

# \* Nose - Epistaxis

## Packing - Newer Agents

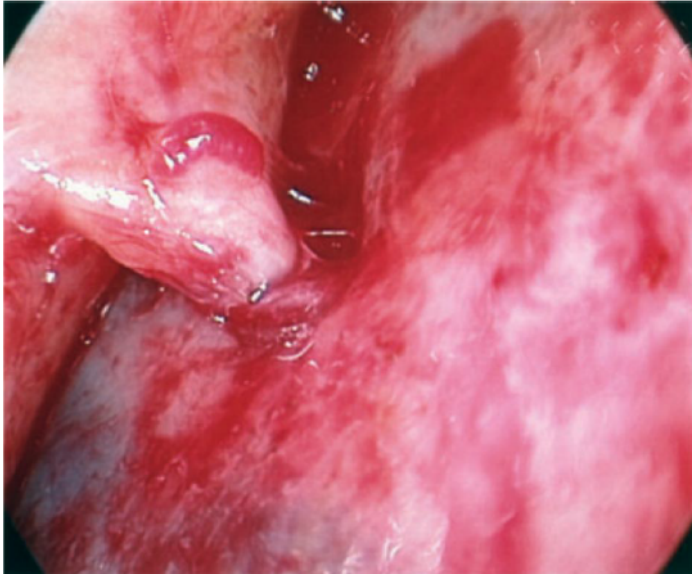


## Selective Embolisation

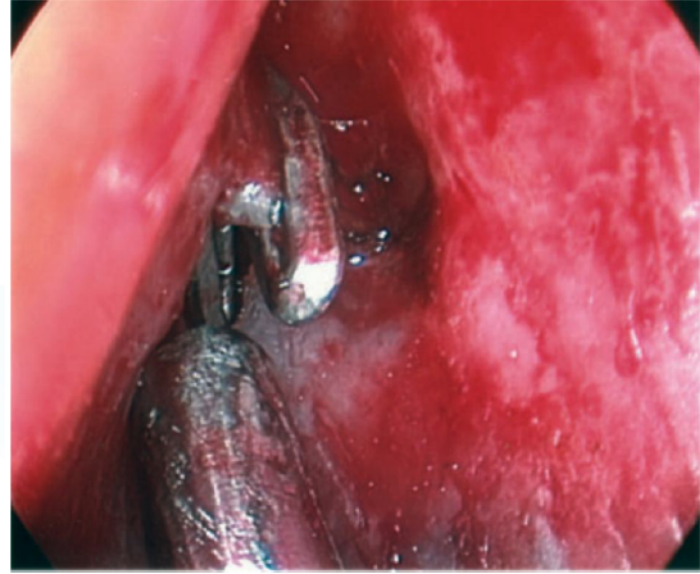


\* Nose - Epistaxis

AEA Ligation - Artery



AEA Ligation - Artery post Clip



\* Nose - Epistaxis

## \* History:

### \* Definitions EPOS 2012 - emphasis on Objective component

- \* PPV of History Alone: 58% for GPs, 73% for ENT
- \* CRS +ve History: 68% & 50% negative on Nasendoscopy and CT respectively

### \* Unified Airway Theory:

- \* 78% of asthmatics have Rhinitis / 38% with Rhinitis have Asthma,
- \* CRS with polyposis: 50% prevalence of Asthma
- \* Onset of Both conditions is within 2 years in 75% of cases

### \* Consider unusual underlying causes - e.g. *Aspirin Exacerbated Respiratory Disease, Churg-Strauss, CF, Wegener's, Sarcoid, Neoplasia*

## \* Examination:

- \* Nice to find objective evidence - Pus, Polyps,



Fig. 1. Interrelationship of airway diseases with allergic rhinitis.

\* **Nose - ARS/CRS**



\* **Definition of Rhinosinusitis:** Inflammation of the Nose and Paranasal Sinuses Characterised by:

- 2 or more Symptoms, one of which should be either:
  - i) nasal blockage/obstruction/congestion OR
  - ii) nasal discharge (anterior or posterior)
    - +/- Facial Pain/Pressure
    - +/- Reduction or loss of smell
- AND Objective Signs of Disease on:
  - i) Nasendoscopy
    - a. Polyps
    - b. Mucopurulent Discharge primarily from *Middle meatus (MM)*
    - c. Oedema/Mucosal Obstruction primarily in *MM*
  - ii) AND/OR CT Sinuses
    - a. Mucosal Changes in *Osteo-meatal Complex* and/or *Sinuses*

\* **Duration:**

- \* Acute: > 10 days, < 12 weeks
- \* Chronic: > 12 weeks

\* **Nose - Allergic Rhinitis / ARS / CRS**



## \* Investigations:

### \* CT Sinuses

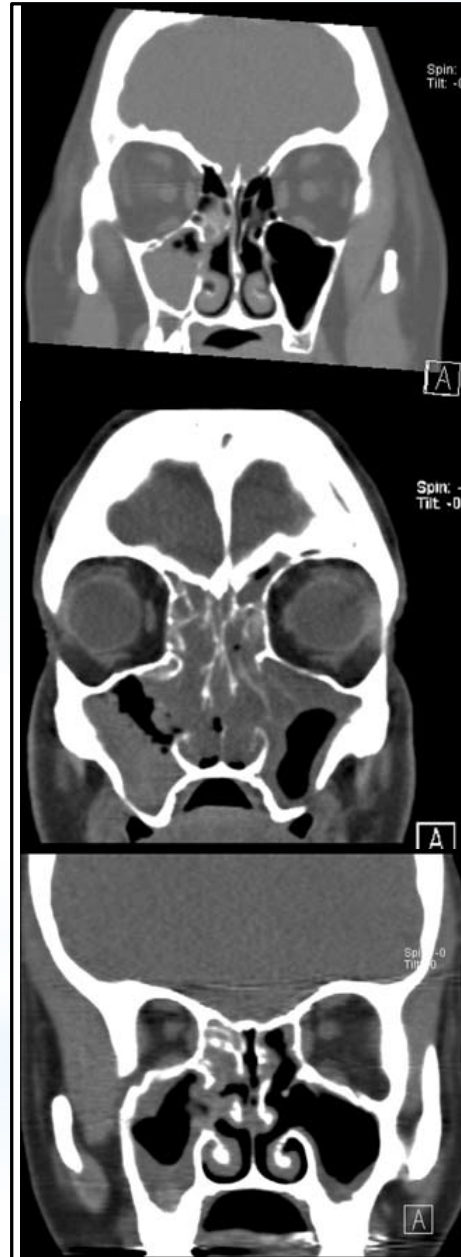
### \* Look for Immunodeficiency

\* Ig Overall Levels

\* Subclass - *e.g. CVID*

### \* Look for Allergy - RAST, Skin Prick Test

# \* Nose - ARS/CRS



- \* Acute: air bubbles
- \* Within fluid density

- \* Acute on Chronic:
- \* Ethmoid & Maxillary
- \* mucosal thickening +
- \* Air bubbles within
  - \* R maxillary sinus indicating purulence

- \* Chronic:
- \* Mucosal thickening of bilateral maxillary sinuses

\* **Treatment:**

\* **Maximal Medical Therapy**

- \* Increasingly Topical Medications - *Steroids* - e.g. *Pulmicort Respules®*, *Anti-histamines*, *Antibiotics*
- \* New Classes - *Antileukotrienes* - e.g. *Montelukast*

\* **Surgery**

- \* : FESS, powered instruments, image guidance
- \* Surgery Improves Symptoms in CRS - it is *NOT* a cure
- \* Increasing conservatism - functional
- \* Drug Eluting Spacers / Stents - e.g. *Propel*

\* **Other Options:**

\* **Immunomodulation**

- \* **Desensitisation:** SCIT / SLIT / Aspirin Desensitisation
- \* **Antibody-Infusion Treatment** - e.g. *Omalizumab (Anti-IgE Ab)*, *Mepulizumab (Anti-IL5 Ab)*
- \* **Ig Replacement** - e.g. *Intragam®*

\* **When to Refer:**

- i)** Failed Medical Treatment
- ii)** Unilateral Symptoms/Signs/Ix
- iii)** Alarm Features -
  - a.** Sinonasal: Bleeding, Cachosmia
  - b.** Orbital: Diplopia, Proptosis, Peri-orbital oedema
  - c.** Cranial: Meningism, Focal neurology
  - d.** Severe Systemic Sx

\* **Nose - ARS/CRS**

A stylized logo consisting of three overlapping leaf-like shapes. The top shape is light green, the middle is light blue, and the bottom is a darker blue. They are arranged in a fan-like pattern, pointing towards the right.

# \*Throat - Oropharyngeal SCC

A stylized logo consisting of three overlapping leaf-like shapes. The top shape is light green, the middle is light blue, and the bottom is a darker blue. They are arranged in a fan-like pattern, pointing towards the right.

# \*Throat - Oropharyngeal SCC



## \* Management:

### \* Hx:

- \* Sleep Hygiene,
- \* Nocturnal Sx
- \* Daytime Sx
- \* Social Complications
- \* Risk Factors
  - \* Obesity (adults)
- \* Other Active Health Problems

### \* Examination:

- \* General
- \* Awake Endoscopy
- \* Drug-induced Sleep Endoscopy (DISE)

## \* Growing Evidence as a modifiable Cardio-vascular Risk Factor:

- \* OR for Hypertension in patients with OSA = **1.37**
- \* OR for CVA in patients with Mod/severe OSA = **4.33** (1.32-14.24)
- \* OR for DM in patients with Mod/Severe OSA = **2.3** (1.28-4.11)

# \* Throat - Snoring & Sleep Apnoea

## Epworth Sleepiness Scale:

- Developed by **Epworth Hospital, Victoria, Australia**
- **Subjective** measure of EDS (compared with **objective** measures of EDS)
- **Assesses Likelihood of Dozing in Certain Activities**
- **GOOD Evaluative Tool; NOT a discriminative Tool**
  - *i.e. scores b/w 2 patients are not comparable.*
- **Score <5/24 or >15/24 is informative...**
  - **NO/YES EDS**
  - Lacks **Sensitivity/Specificity**

Activity	Score – likelihood of Dozing
1. <b>Sitting &amp; Reading</b>	<b>0 = Never</b> <b>1 = Slight Chance of Dozing</b> <b>2 = Moderate Chance of Dozing</b> <b>3 = High Chance of Dozing</b>  <b>Total = 24</b>
2. <b>Watching TV</b>	
3. <b>Sitting, inactive in a public Place (e.g. theatre / meeting)</b>	
4. <b>As a passenger in a car for an hour without a break</b>	
5. <b>Lying Down to rest in the afternoon when circumstances permit</b>	
6. <b>Sitting &amp; Talking to someone</b>	
7. <b>Sitting quietly after lunch without EtOH</b>	
8. <b>In a car, while stopped for a few minutes in Traffic</b>	

\* **Throat - Snoring & Sleep Apnoea**

Feature	Adult	Child
Presentation		
Gender	2M : 1F	1M : 1F
Excessive daytime sleepiness	<b>Main presenting complaint</b>	Infrequent complaint
Associated obesity	<b>Majority of patients</b>	Minority of patients
Underweight / failure to thrive	Not seen	<b>Frequent</b>
Daytime mouth-breathing	Not seen	<b>Frequent</b>
Enlarged Ts & As	Rarely seen	<b>Frequent</b>
Sleep pattern		
Obstructive	Obstructive apnoea	Obstructive apnoea or <b>obstructive hypoventilation</b>
Arousal with obstruction	Common ( <i>i.e. RERAs</i> )	May be less frequent ( <i>therefore don't report RDI</i> )
Disrupted	Common	Not often seen
Management		
Medical (positive pressure)	<b>Most common</b>	Only in selected patients
Surgical	Minority of patients with inconsistent results	<b>Definitive in many</b>

# \*Throat - Snoring & Sleep Apnoea

## \* Ix:

- \* In-Lab Monitored PSG - Remains Gold Standard
- \* Out-of-centre-sleep-testing (OCST)

PROS (over PSG)	CONS (compared with PSG)
<ol style="list-style-type: none"><li>1. Better Patient Comfort</li><li>2. <b>Cost Saving</b></li><li>3. Prevention of <b>Admission</b></li><li>4. Speed of Analysis of Data</li></ol>	<ol style="list-style-type: none"><li>1. Sensor Failure @ home</li><li>2. Loss of signal (which may lead to repeat studies)</li><li>3. Fewer signal channels (less information)</li><li>4. <b>AHI is based on Total-Recording-Time; NOT the Total Sleep Time</b> - Therefore, likely to underestimate severity of OSA</li></ol>



*e.g. WatchPat® - strong correlation with PSG (r=0.9); high sens/spec*

# \* Throat - Snoring & Sleep Apnoea



## \* Ix:

### \* Home Oximetry in children

- \* Indication: useful screening tool
- \* High PPV: 97% for OSA if  $\geq 3$  drops below 90% SaO<sub>2</sub>
- \* Low NPV: 47% - normal, inconclusive study doesn't exclude Severe OSA

**TABLE 1.** The McGill Oximetry Scoring System Devised in Phase 1 and Validated in Phases 2 and 3

Oximetry Score	Comment	Criteria				Recommendation
		No. of Drops in SaO <sub>2</sub> <90%	No. of Drops in SaO <sub>2</sub> <85%	No. of Drops in SaO <sub>2</sub> <80%	Other	
1	Normal study/ inconclusive for OSA	<3	0	0	Baseline: stable (<3 clusters of desaturation) and >95%	Additional evaluation of breathing during sleep required to rule out OSA
2	OSA, mild	$\geq 3$	$\leq 3$	0	Three or more clusters of desaturation events <sup>14</sup>	Recommend T&A on the waiting list
3	OSA, moderate	$\geq 3$	>3	$\leq 3$	Three or more clusters of desaturation events <sup>14</sup>	Recommend surgery within 2 wk
4	OSA, severe	$\geq 3$	>3	>3	Three or more clusters of desaturation events <sup>14</sup>	Recommend urgent surgery (within days)

## \* Throat - Snoring & Sleep Apnoea

## \* Treatment Options:

- \* Lifestyle: Sleep Hygiene, Weight loss, EtOH avoidance

- \* Medical/Conservative: CPAP, MAS

- \* Surgery:

- \* Indications:

1. Failure of Conservative Measures

2. Patient Additional Anatomical Symptoms - nasal obstruction, snoring, etc.

3. Up-front patient desire to pursue surgery

- \* Need & Nature: Determined by:

1. Severity of OSA

2. Level of Obstruction

3. Chance of Success with particular Surgery

4. Chance of Morbidity with particular surgery

Options:

- \* Nasal

- \* Palate: UPPP, Palatal Advancement Pharyngoplasty

- \* Base of Tongue / Hypopharynx: Lingual Tonsillectomy, Tongue Base Volume Reduction

- \* Maxillary-Mandibular: Mandibulo-Maxillary Advancement

- \* (Tracheostomy)

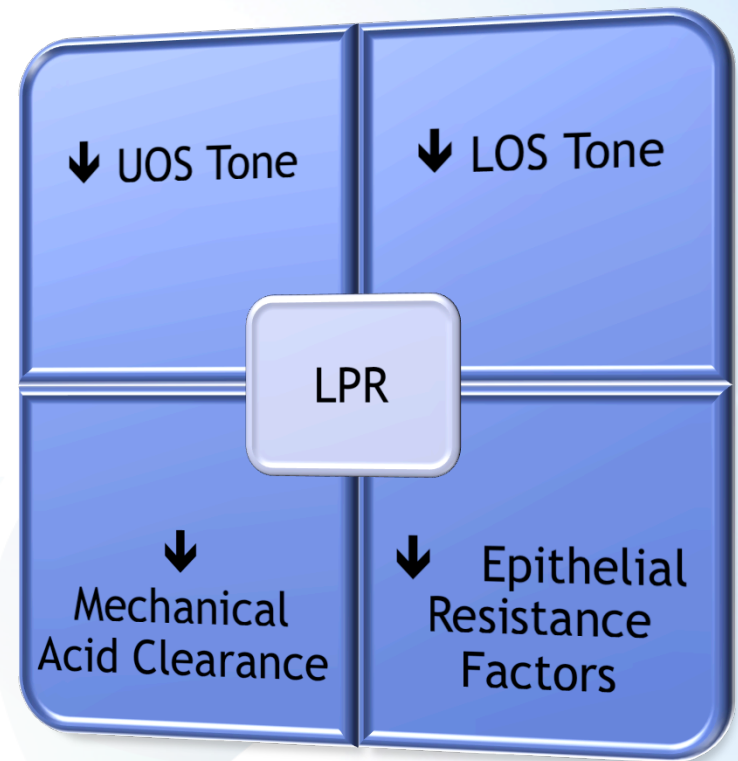
# \* Throat - Snoring & Sleep Apnoea

## Definition:

- \* The retrograde movement of gastric contents into the *Laryngopharynx* → symptoms referable to the larynx/hypopharynx

## Epidemiology:

- \* *Koufman et al*: 50% of patients with laryngeal/Voice disorders had LPR
- \* 4-10% of patients in general ENT practice
- \* **Aetiopathogenesis:**



# \* Throat - Laryngopharyngeal Reflux

## \* History:

### \* Extra-Oesophageal Reflux Symptoms

- \* Voice: Hoarseness, Vocal Fatigue, Voice breaks
- \* Airway: Cough, Throat Clearing, Laryngospasm
- \* Swallow: Globus, Sore throat, dysphagia
- \* Pro Voice: loss of upper range, prolonged warm-up

### \* ? Oesophageal Reflux Symptoms

- \* Only in 35% of LPR patients

### \* RSI score

- \* > 10 predictive of a positive pH/Impedance study

#### Box 65-3

#### The Reflux Symptom Index

Within the past month, how did the following problems affect you? Rank them from 0 (no problem) to 5 (severe problem).

1. Hoarseness or a problem with your voice
2. Clearing your throat
3. Excess throat mucus or postnasal drip
4. Difficulty swallowing food, liquids, or pills
5. Coughing after you have eaten or after lying down
6. Breathing difficulties or choking episodes
7. Troublesome or annoying cough
8. Sensations of something sticking in your throat or a lump in your throat
9. Heartburn, chest pain, indigestion, or stomach acid coming up

From Belafsky PC, Postma GN, Amin MR, Koufman JA. Symptoms and findings of laryngopharyngeal reflux. *Ear Nose Throat J.* 81(Suppl 2):10, 2002.

# \* Throat - Laryngopharyngeal Reflux



- \* Examination
  - \* Non-specific findings of inflammation
  - \* Combination of:
    - \* Laryngeal Features
    - \* Pharyngeal Features
  - \* Reflux Finding Score (RFS)
    - \* > 7/26 = high likelihood that dual probe pH monitoring will be positive
    - \* **But, relatively poor correlation with symptoms**
      - \* **Sens = 87.8%**
      - \* **Spec = 37.5%**
    - \* **1 or more signs found in >80% of healthy adults**

**Table 65-1**

**The Reflux Finding Score**

Pseudosulcus	0, absent; 2, present
Ventricular obliteration	0, none; 2, partial; 4, complete
Erythema/hyperemia	0, none; 2, arytenoids only; 4, diffuse
Vocal fold edema	0, none; 1, mild; 2, moderate; 3, severe; 4, polypoid
Diffuse laryngeal edema	0, none; 1, mild; 2, moderate; 3, severe; 4, obstructing
Posterior commissure hypertrophy	0, none; 1, mild; 2, moderate; 3, severe; 4, obstructing
Granuloma/granulation	0, absent; 2, present
Thick endolaryngeal mucus	0, absent; 2, present

# \* Throat - Laryngopharyngeal Reflux

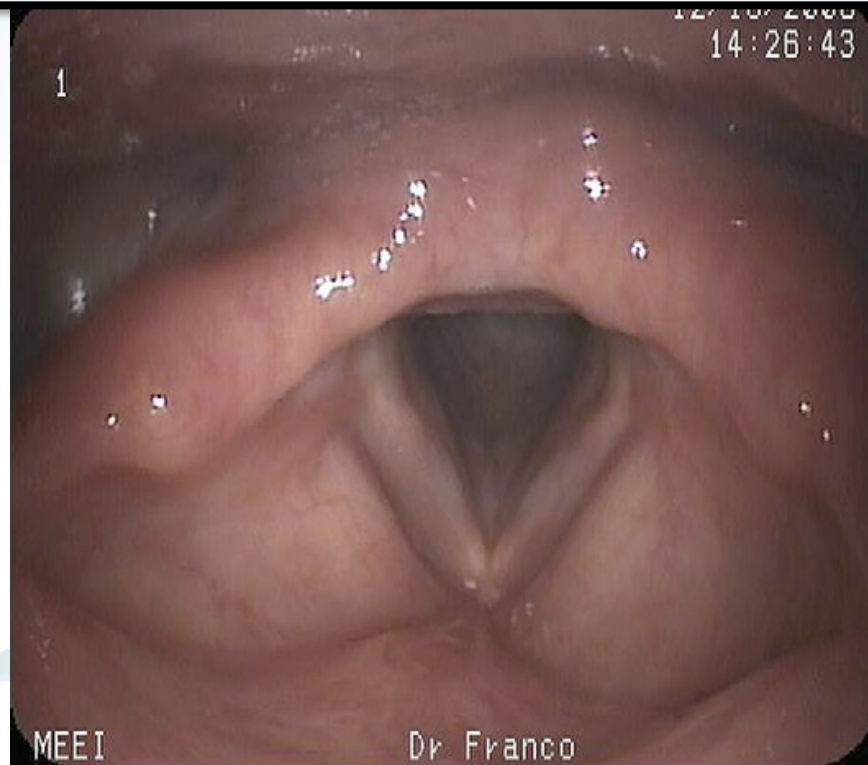


Fig. 1. Laryngopharyngeal reflux. Note diffuse periarytenoid and postcricoid edema, vocal fold edema, and pseudosulcus (the appearance of a “second” vocal fold inferior to the true vocal fold due to edema). The larynx is wet appearing; copious, thick mucus is not seen in this patient as in others.

## \* Throat - Laryngopharyngeal Reflux

\* Investigation:

\* 24-hour Multi-Channel pH Monitoring / Impedance

\* Technique: Double or Triple Probe measures acid and non-acid reflux events

\* Test Findings:

\* pH drop to  $< 4$

\* No. of episodes / 24 hours

\* % Time  $< 4$  / 24 hours

\* Impedance drop by  $> 50\%$

\* Test Properties

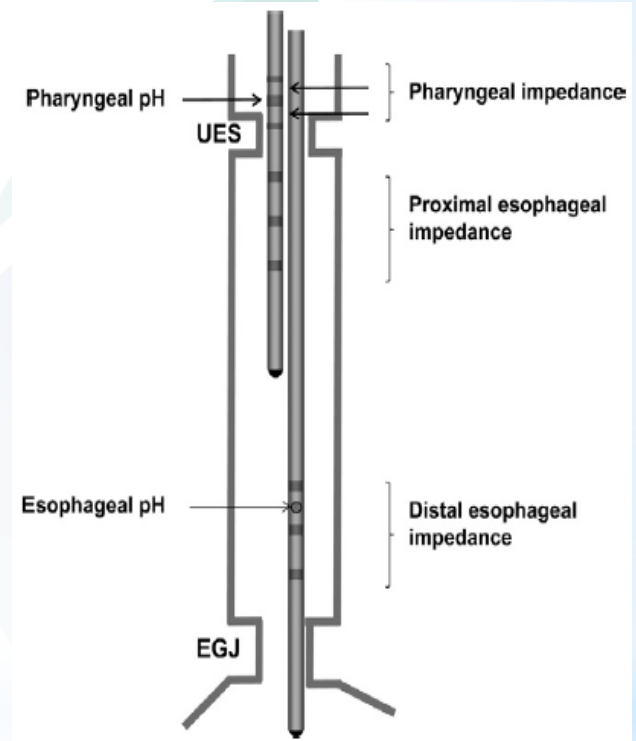
\* Sens = poor

\* Spec = Excellent

\* ? Reproducibility - pseudoreflux due to drying

\* **Poor prediction of response to therapy**

## Oesophageal and Pharyngeal pH-Impedance Catheter



\* Throat = LPR

\* Investigation Cont'd

\* Single oro-pharyngeal Impedance Probe - *e.g.* **Restech**

- \* **Technique:** trans-nasal probe in oropharynx
- \* **Test Results:**
  - \* % Time below Cutoff
  - \* Number of Episodes
  - \* Duration of longest episode
- \* **Test Properties**
  - \* Spec: 100%
  - \* High PPV
  - \* Sens: 69%

**Restech Probe** ®



\* **Throat = LPR**



## Peptest<sup>®</sup>

- \* Diagnosis Cont'd:
  - \* Oral Immunologic Pepsin Assay - *Peptest*<sup>®</sup>
    - \* Detects Pepsin in oral saliva through the use of two *Anti-Pepsin Monoclonal Abs*

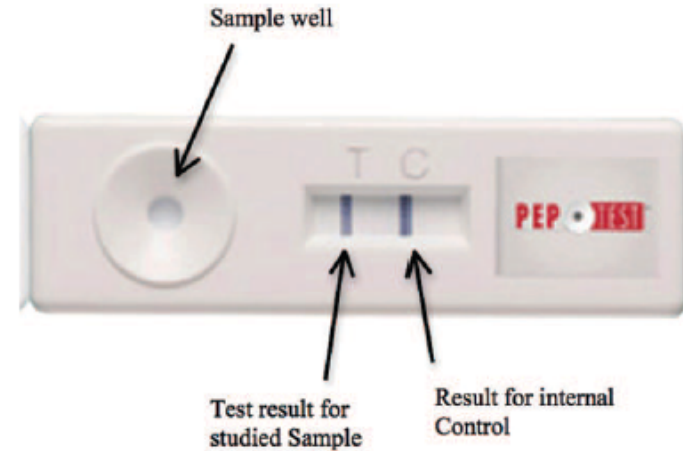
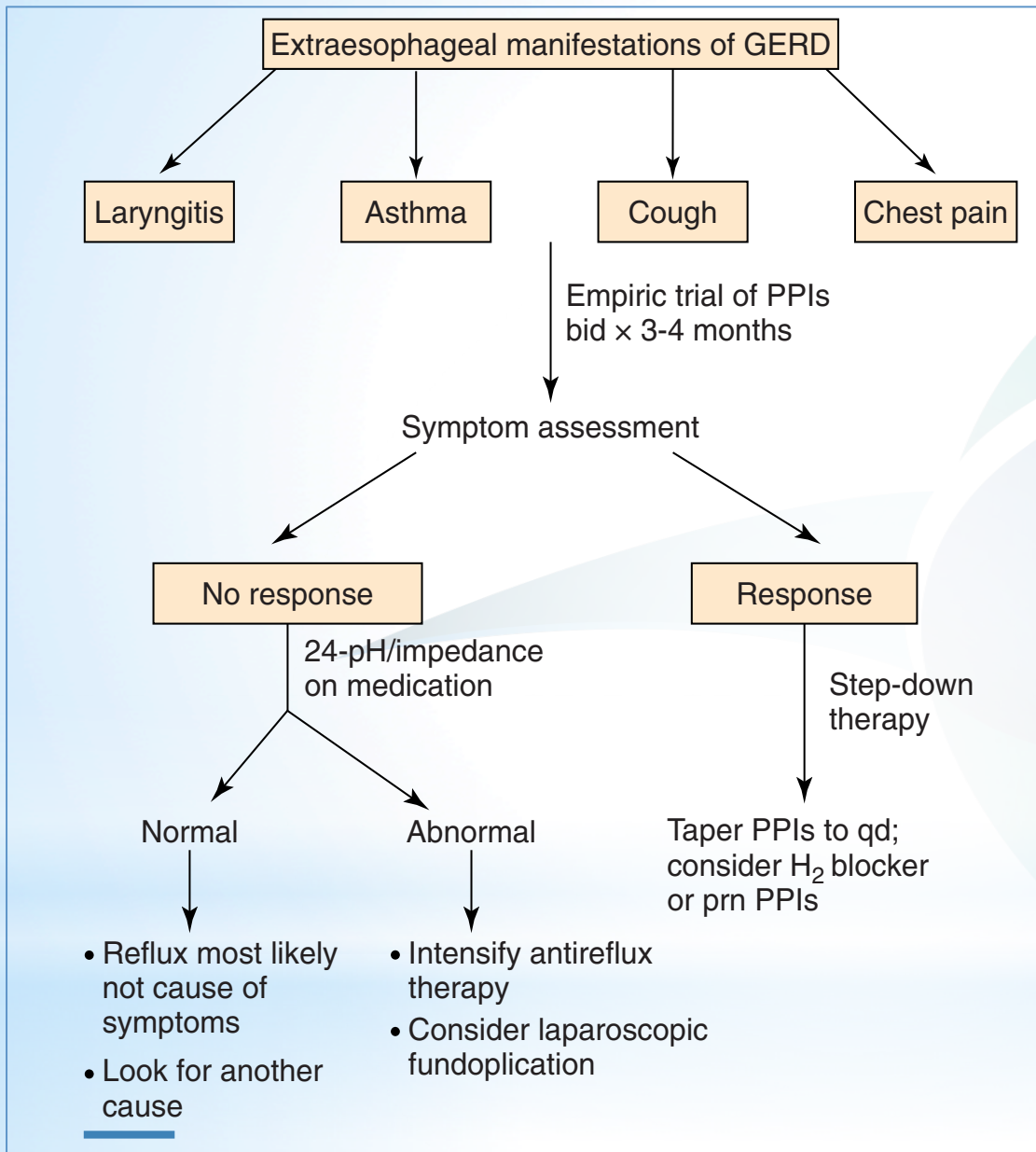


Fig. 1. Pepsin lateral flow device for a gastric juice sample showing a positive pepsin test relative to the control band (C = control band. T = test sample band). [Color figure can be viewed in the online issue, which is available at [wileyonlinelibrary.com](http://wileyonlinelibrary.com).]

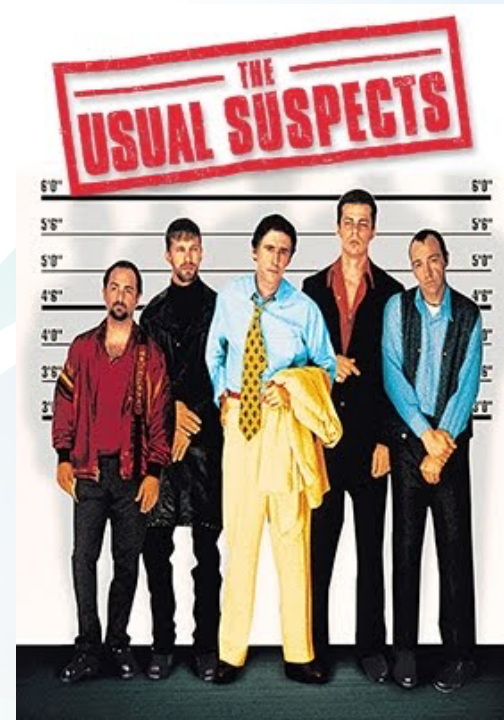
\* Throat - LPR



\* Throat - LPR

## Laryngeal Neuropathic Cough

- \* Exclude the 'Usual' Suspects:
  - \* Pulmonary Pathology
  - \* Laryngopharyngeal Reflux
  - \* Allergy / Sino-nasal disease
  - \* ACE inhibitor
- \* **History:** Dry, irritant cough; scratchy feeling, paroxysmal, exacerbated by benign stimuli
- \* **Examination:** unremarkable
- \* **Investigations:** unremarkable



\* **Throat - The Irritable Larynx**

## \* History

### Box 1

#### History associated with PVFMD

Tightness in neck rather than chest

More difficulty getting air in than out

Symptoms brought on by exertion

Events associated with stress or strong emotions

Events triggered by strong odors, perfumes, or chemicals

Rapid onset of dyspnea

Noisy breathing (usually on inhalation)

Poor or inconsistent response to inhalers

History of negative asthma workup

\* **Examination:** unremarkable

\* **Investigations:** unremarkable - though up to 50% do have concurrent +ve diagnosis of Asthma

\* Normal CXR

\* Normal Spirometry

\* **Throat - The Irritable  
Larynx - PVFM**



**\* Treatment:**

**1. Speech Therapy -  
Laryngeal Retraining**

**2. Medical:**

**i) Treat Irritants**

**a. LPR**

**b. Allergic Rhinitis**

**ii) 'Stabilise' Nerves**

**a. Amitriptyline**

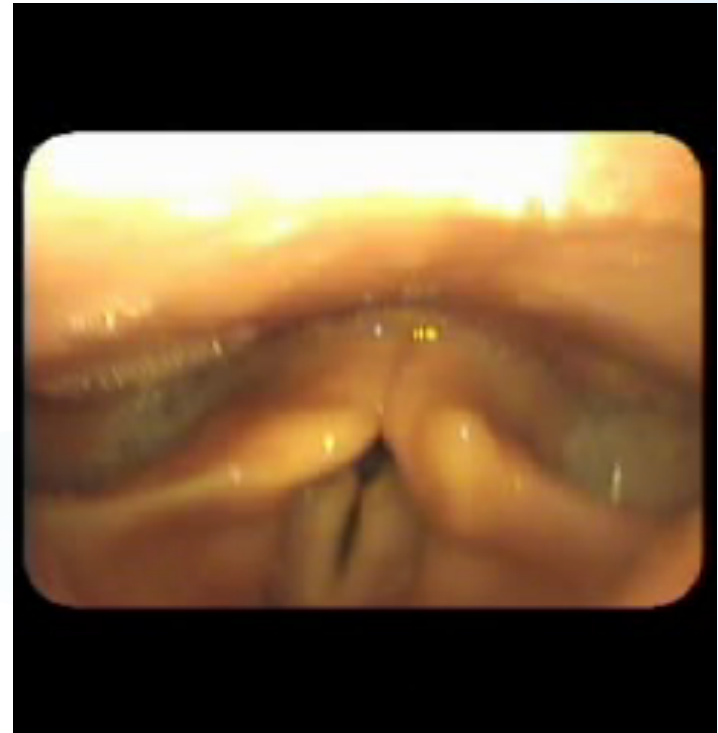
**b. Gabapentin**

**c. Pregabalin**

**3. Procedural**

**i) Botulinum Toxin**

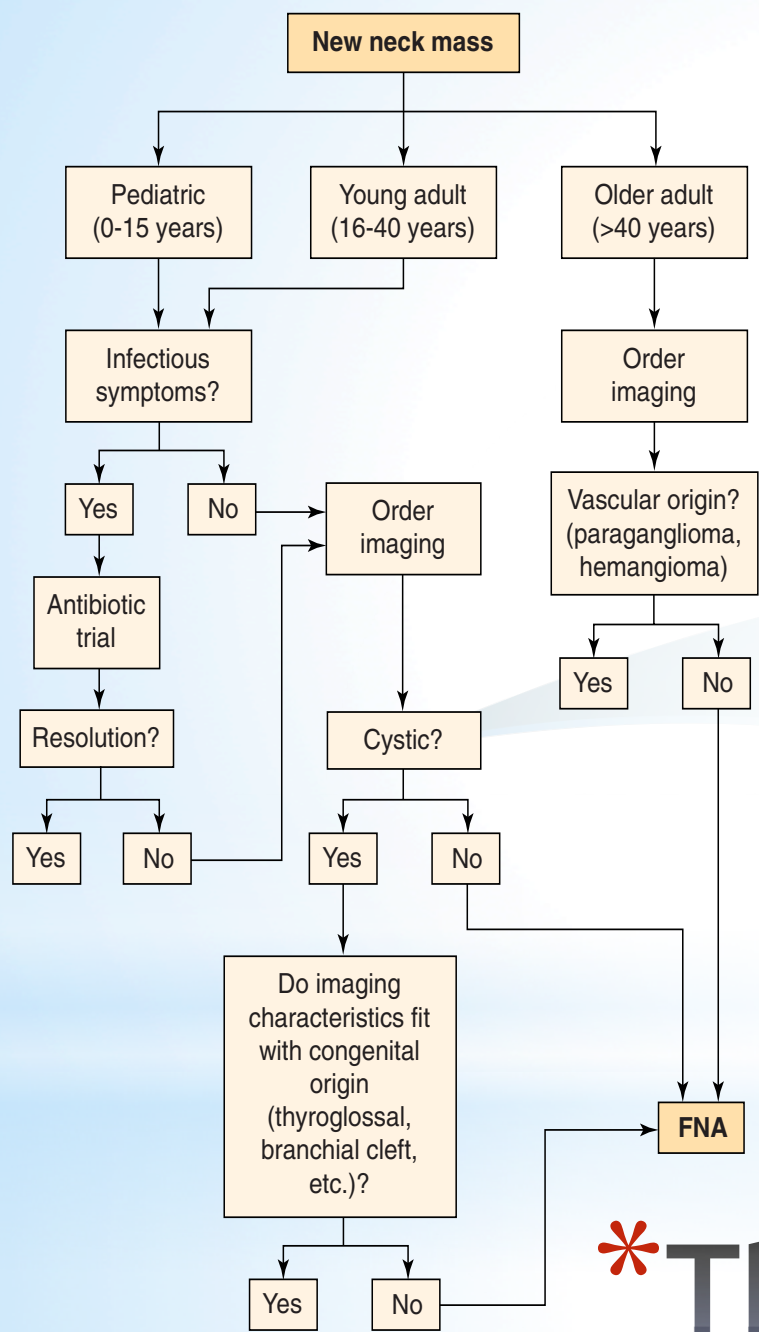
- Unilateral TA/LCA



**\* Throat - The Irritable Larynx - PVFM**

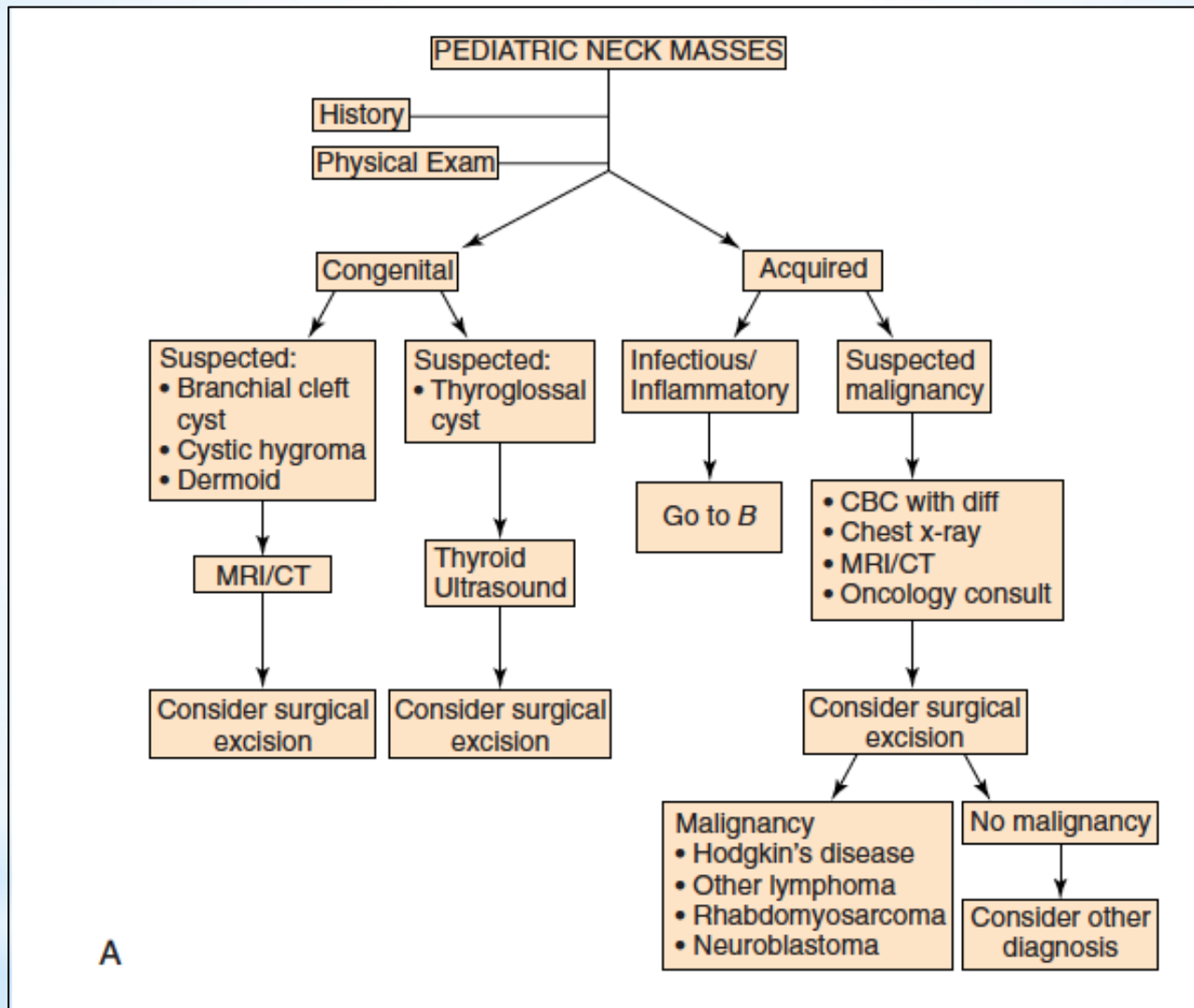
- \* **Adult Neck Mass**
- \* Any solid asymmetric mass **MUST** be considered a metastatic neoplastic lesion until proven otherwise
- \* Asymptomatic cervical mass - 12% of cancer
  - \* ~ 80% of these are SCCa
- \* Any New Cystic mass (> 40 y.o.a.) must be considered a cystic metastatic lesion until proven otherwise
  - \* Thyroid
  - \* SCC
  - \* Melanoma

# \* Throat - Neck Masses



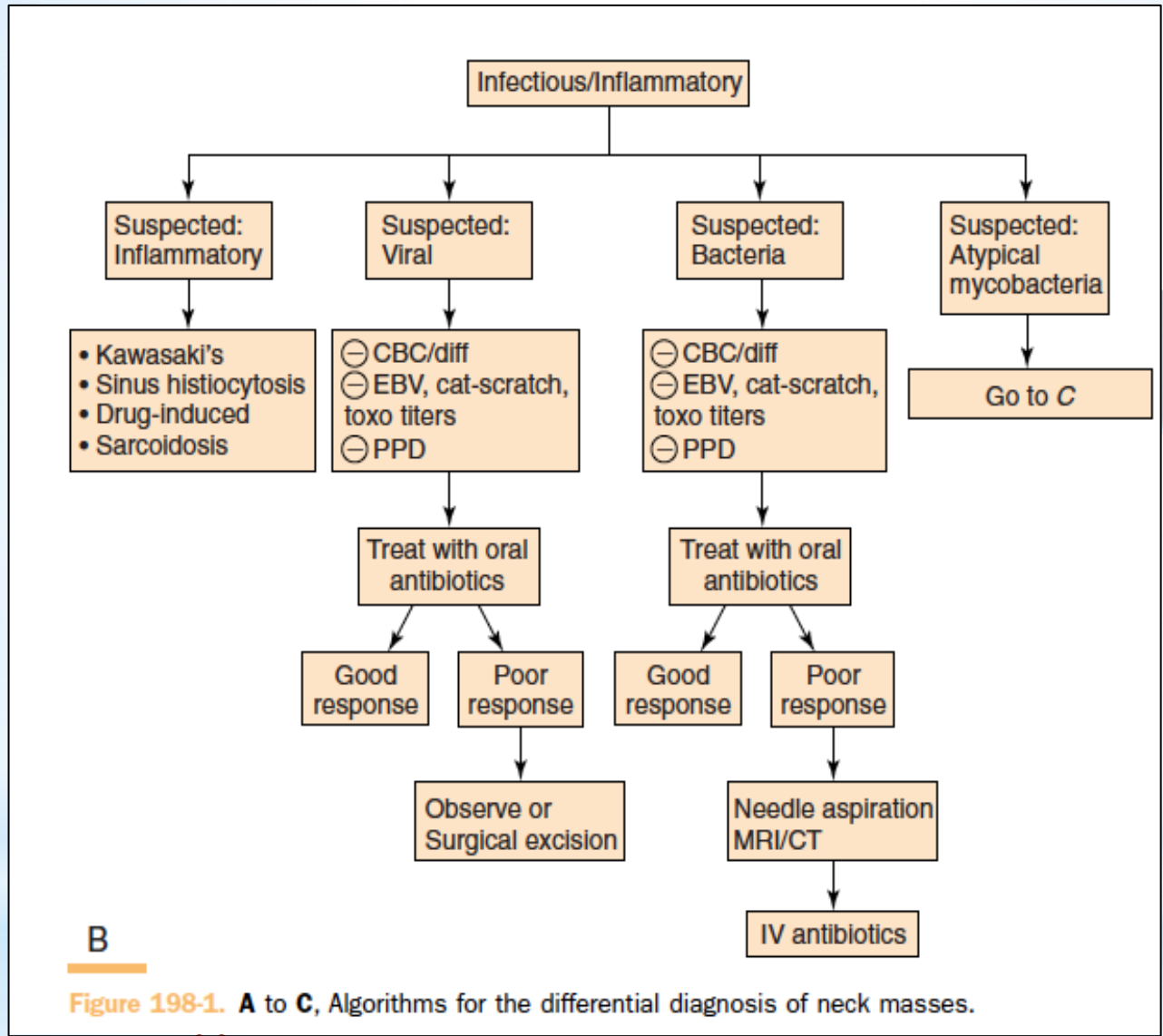
# \* Throat - Neck Masses

Figure 116-2. Diagnostic schema for a new neck mass.

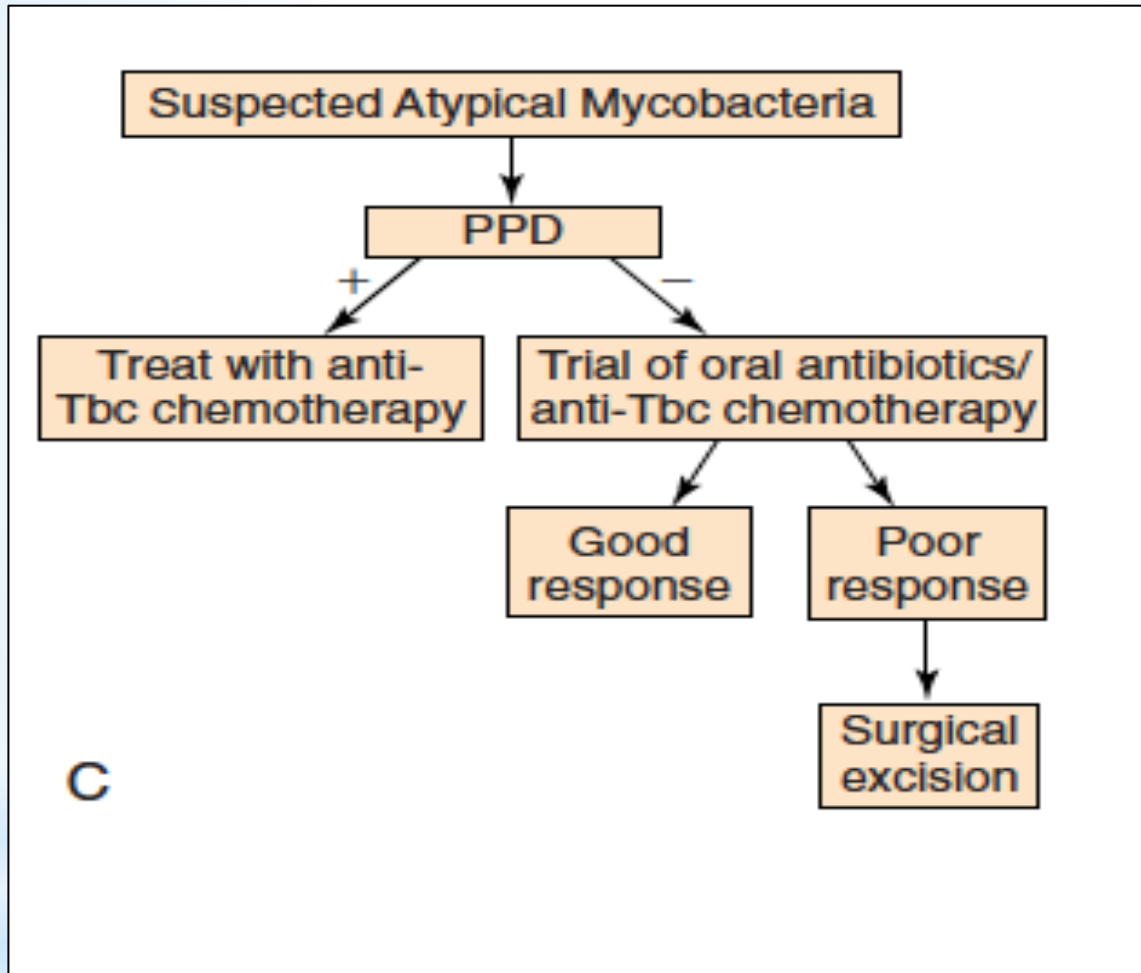


# \*Throat - Neck Masses





# \*Throat - Neck Masses



# \*Throat - Neck Masses

## \* Indications: Adenoidectomy

### 1. Infection:

- i) Chronic Purulent Adenoiditis
- ii) Adenoid Hypertrophy a/I Ear Disease: *OME/recurrent AOM/CSOM/MEVT otorrhoea*
  - N.B. on 2<sup>nd</sup> or 3<sup>rd</sup> Set of MEVTs

### 2. Obstruction:

- i) Adenoid hypertrophy a/I OSA
- ii) Adenoid Hypertrophy with chronic Nasal obstruction

### 3. Other:

- i) Suspected Neoplasia
- ii) Adenoid Hypertrophy A/I Chronic Sinusitis

## \* Throat - Adeno-Tonsillectomy

# \* Indications: Tonsillectomy

1. **Upper Airway Obstruction** in children with **OSA**
  - i) **Moderate/Severe OSA:** 1<sup>st</sup> line Treatment
    - **Becoming** primary indication in Children – 85-95% cure rate
2. **Frequent Recurrent Acute Tonsillitis:**
  - i) **7 episodes** in **preceding 12/12**
  - ii) **5 episodes/year** for **2 years**
  - iii) **3 episodes/year** for **3 years**
    - **Also Consider:** Severity of each episode, response to Abx, Number of school days missed, etc
    - **Evidence:**
      - Using these “**Paradise Criteria 1984**” (above), there was **significant reduction** in **febrile episodes** over the subsequent **2 years** post **Ts/As** compared with controls
      - Almost **significant reduction** in **Sore Throats** over **2 years** also. (significant @ **3 years**)
3. **Peri-tonsillar Abscess:**
  - i) **Single Episode** – 5-22% chance recurrence in 5 years
  - ii) **2 Episodes** - ? 75-85% chance recurrence in 5 years
4. **Suspected Neoplasm:** only **Absolute Indication** – possible diagnosis if....
  - i) **Short Hx < 4-6/52**
  - ii) **Unilateral tonsillar enlargement > 3cm**
  - iii) **Significant Cervical LAD > 3cm**
  - iv) **Hepatosplenomegaly**
  - v) **B Symptoms**
5. **Uncommon Indications:**
  - i) **Tonsiloliths / Tonsillar Cysts / Halitosis**
  - ii) **Other medical problems: Valvular Heart Disease, VP-shunts, Febrile Seizures, poorly controlled DM**
  - iii) **Recurrent Tonsillar Haemorrhage**
  - iv) **Chronic Diphtheria Carrier status after failed Antibiotic Eradication**

# \* Throat - Adeno-Tonsillectomy



## \* Techniques:

- \* Cold Steel

- \* 'Hot' Techniques: Monopolar/  
Bipolar Diathermy

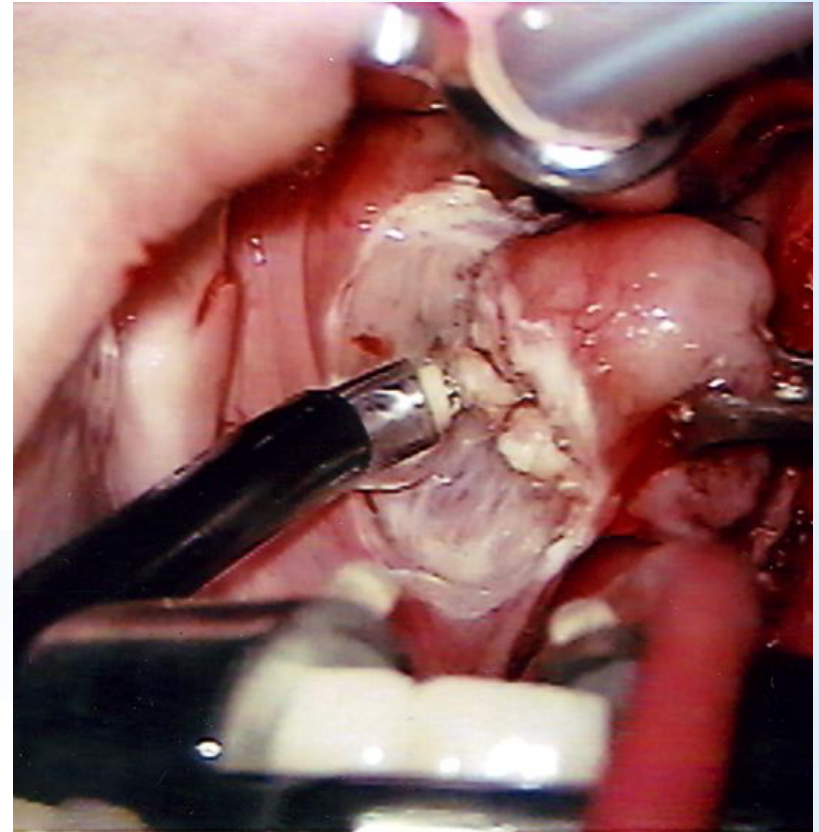
- \* 'Warm' Techniques: Coblation  
Tonsillectomy

- \* Reduced post-operative pain in small  
prospective trials

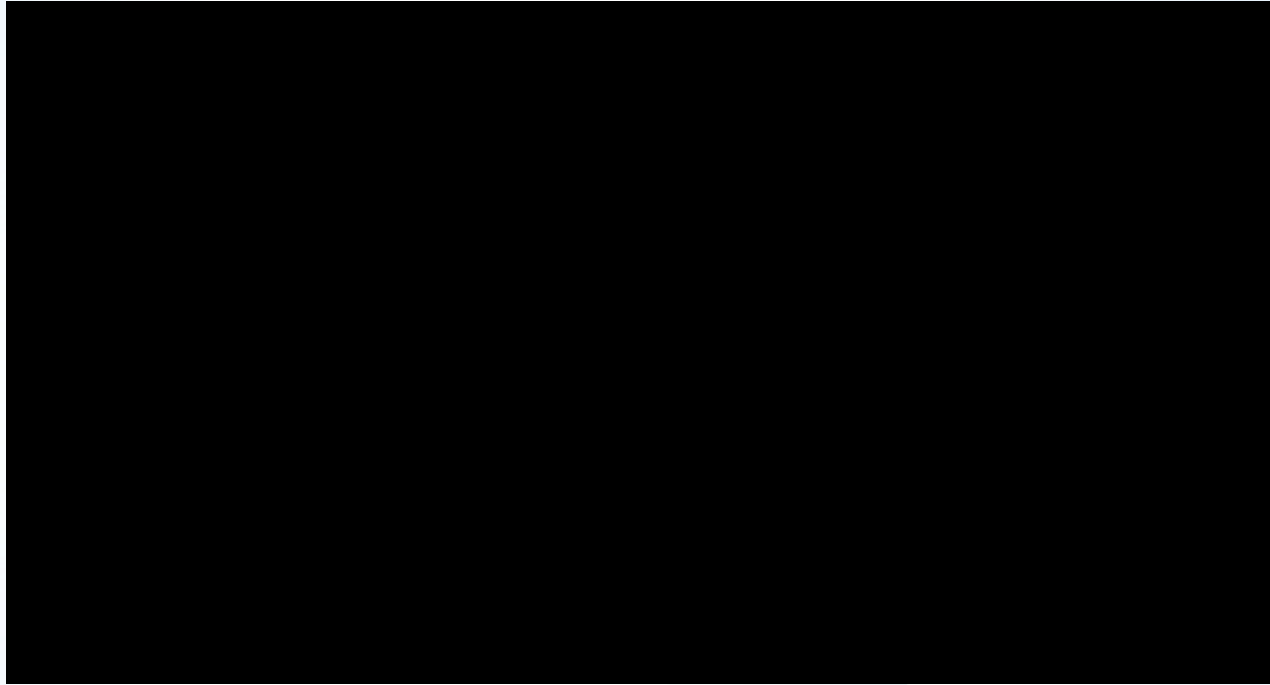
- \* Similar bleed rate

## \* Analgesia:

- \* Recent prospective RCT - Use of  
NSAIDS does NOT increase risk of  
post-operative haemorrhage



# \* Throat - Adeno-Tonsillectomy



# \*Throat - Adeno-tonsillectomy

## \* Guidelines and Position Statements:

- \* EPOS 2012

- \* American Academy of Otolaryngology Head and Neck Surgery - Clinical Practice Guidelines



- \* <http://www.entnet.org/content/clinical-practice-guidelines>

# \* References



**MEG**

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 **About Us -**



\* A Group of sub-specialty Fellowship trained ENT Surgeons

\* Mr Guillermo Hurtado

\* General ENT & Fellowship trained in Otology

\* Mr Paul M Paddle

\* General ENT & Fellowship trained in Laryngology

\* **About Us -**

- \* Our Services / Specialty Interests @ Richmond:
  - \* Consulting / Operating on the Following ENT conditions
    - \* General ENT
    - \* Paediatric ENT
    - \* Otology & Vestibular Disorders
    - \* Snoring and Sleep Apnoea
    - \* Rhinology
    - \* Facial Plastics
    - \* Head and Neck
    - \* Laryngology - Voice / Airway / Swallow
  - \* Audiology - “Richmond Audiology” - and independent full-audiology practice conveniently co-located with MEG
  - \* Office Based Laryngology
  - \* pKTP Laser, Photodynamic Therapy,

\* About Us -

- \* **Additional Practices:**
  - \* Melbourne Voice Analysis Centre (MVAC)
  - \* South East ENT
- \* **Our Hospital Appointments/Accreditations:**
  - \* **Private:**
    - \* Epworth Richmond
    - \* Epworth Eastern
    - \* Mercy Private East Melbourne
    - \* Como Private Hospital
  - \* **Public:**
    - \* Monash Health
    - \* Alfred Health
    - \* Warragul Hospital
    - \* Swan Hill District Hospital
- \* **Rural Outreach Services:**
  - \* Swan Hill
  - \* West Gippsland

\* **About Us -**

## \* Our Teaching / Professional Positions

\* Paul Paddle:

\* Adjunct Lecturer - Monash University

\* Adjunct Senior Lecturer - LaTrobe University

\* About Us -

Mr Paul M Paddle



Mr Guillermo Hurtado



\*Thank You