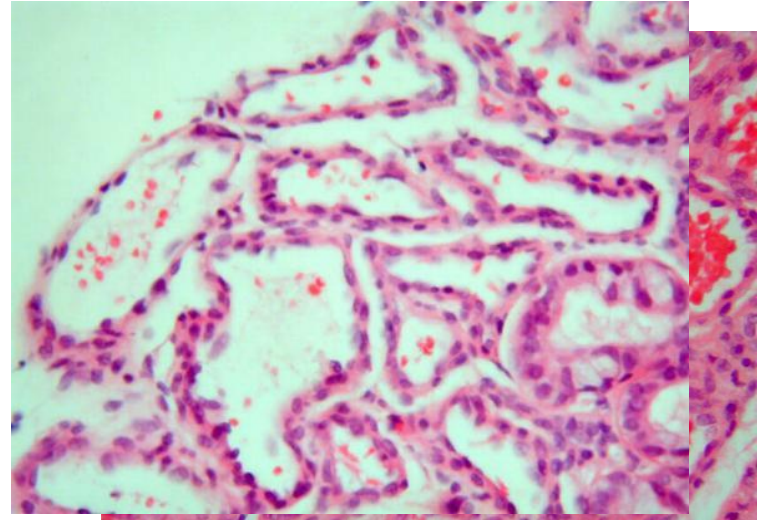


Subglottic Haemangioma

Dave Albert

History, pathology and epidemiology

- First described by Morell Mackenzie in 1864
- Caucasian preponderance
- Twice as common in females
? Hormonal
- cavernous \leftrightarrow capillary spectrum



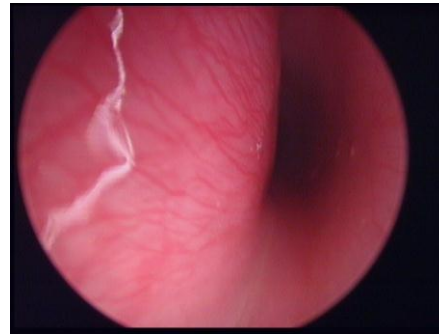
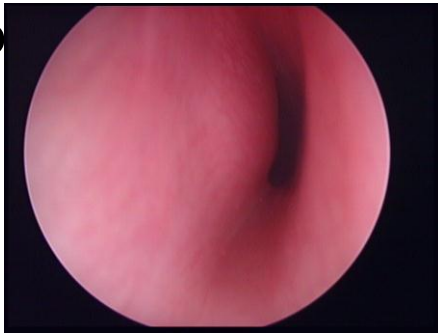
Association of SGH with cutaneous

- 50% of patients with SGH have associated head and neck cutaneous haemangioma
- ? What percentage of those with cutaneous have SGH?
(and of those with stridor?)

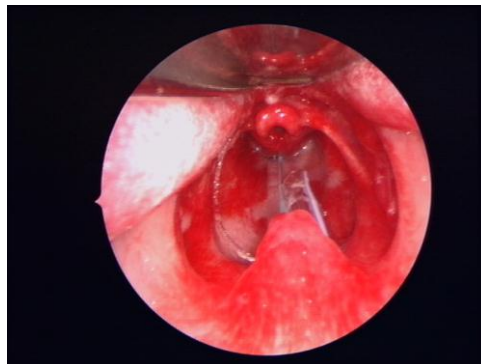
Site

- Usual site is left lateral subglottis

- why?



- Occasionally in glottis and trachea



Presentation

- Presentation peaks at 6 weeks
 - ?hormonal
- stridor, “recurrent croup”
- feeding difficulties, FTT
- Unusual; 60 @GOS in 15 years

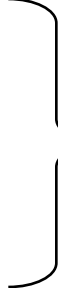
Diagnosis

- Diagnosis at endoscopy
- Can be biopsied safely as capillary not cavernous haemangioma

Natural History

- Regression
 - *Cutaneous* usually regress by 6-8 years
 - *Subglottic* involute sufficiently so that most are asymptomatic by 2-3 years

Management

- Observation
 - 50 - 70% will need a tracheostomy until about 18 months
 - Medical treatments
 - 
 - Surgical treatments
- to avoid tracheostomy

Medical management

- **Systemic steroids**

- Sufficiently high dose (1mg/kg prednisolone) to cause side effects and risks of steroid therapy ? Alternate days
- Requires advice and support of paediatric endocrinologist

Medical management

- **Interferon alfa-2a**
 - antiviral
 - noted to improve Kaposi's sarcoma in patients with AIDS
 - some promising results over a prolonged period of administration
 - well recognised reversible side effects

Medical management

- Propanolol

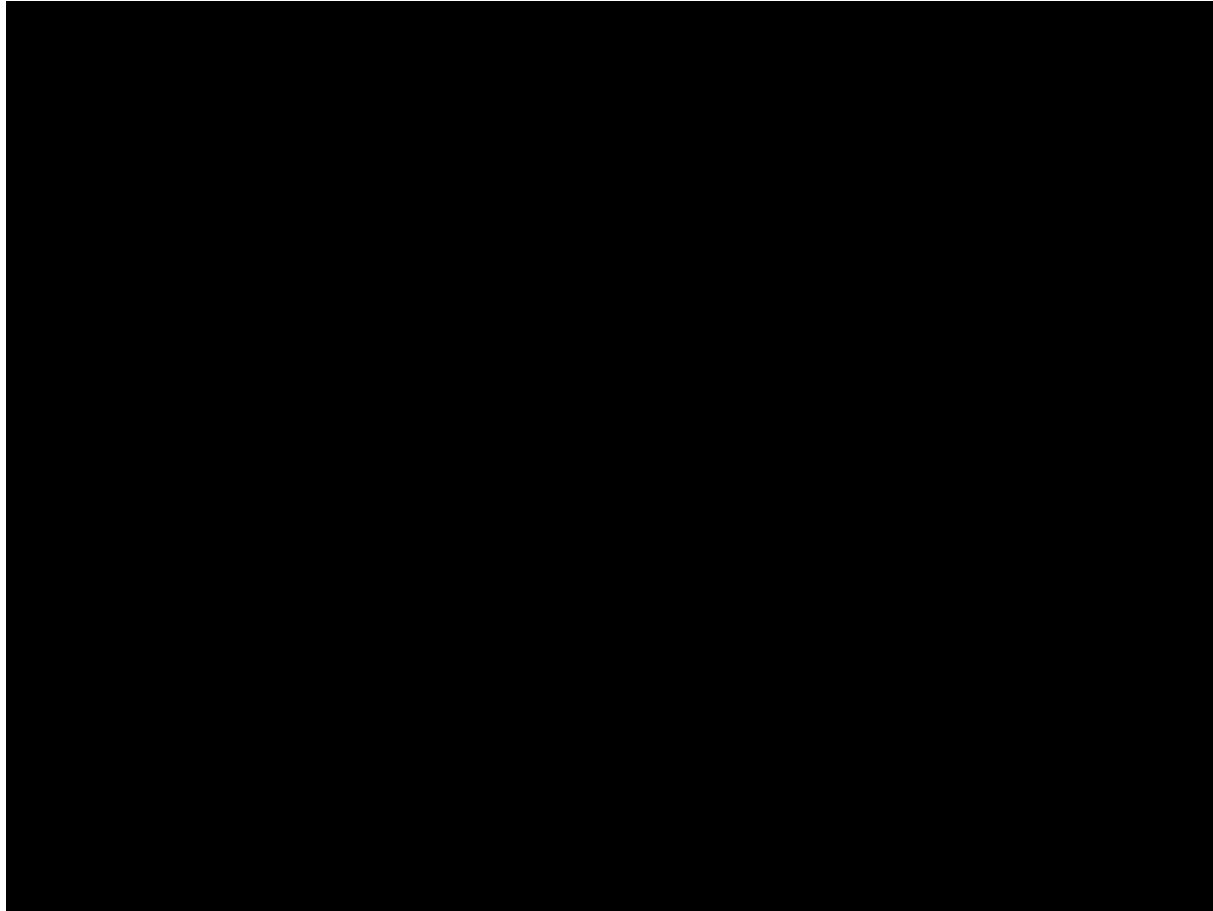
– first noted in Bordeaux in patient with obstructive cardiomyopathy and nasal haemangioma – lesion regressed on propanalol



First GOS patient: SGH, trachy after debulk, July 2008



First GOS patient: endoscopy



Click on videos to make
them play

Surgical management

- Tracheostomy
- Laser
- Steroid injection
- Open excision

Surgical management

- Tracheostomy
 - 0-4% mortality
 - social and family issues
 - speech language delay
 - suprastomal collapse
 - *but*
 - should resolve without stenosis

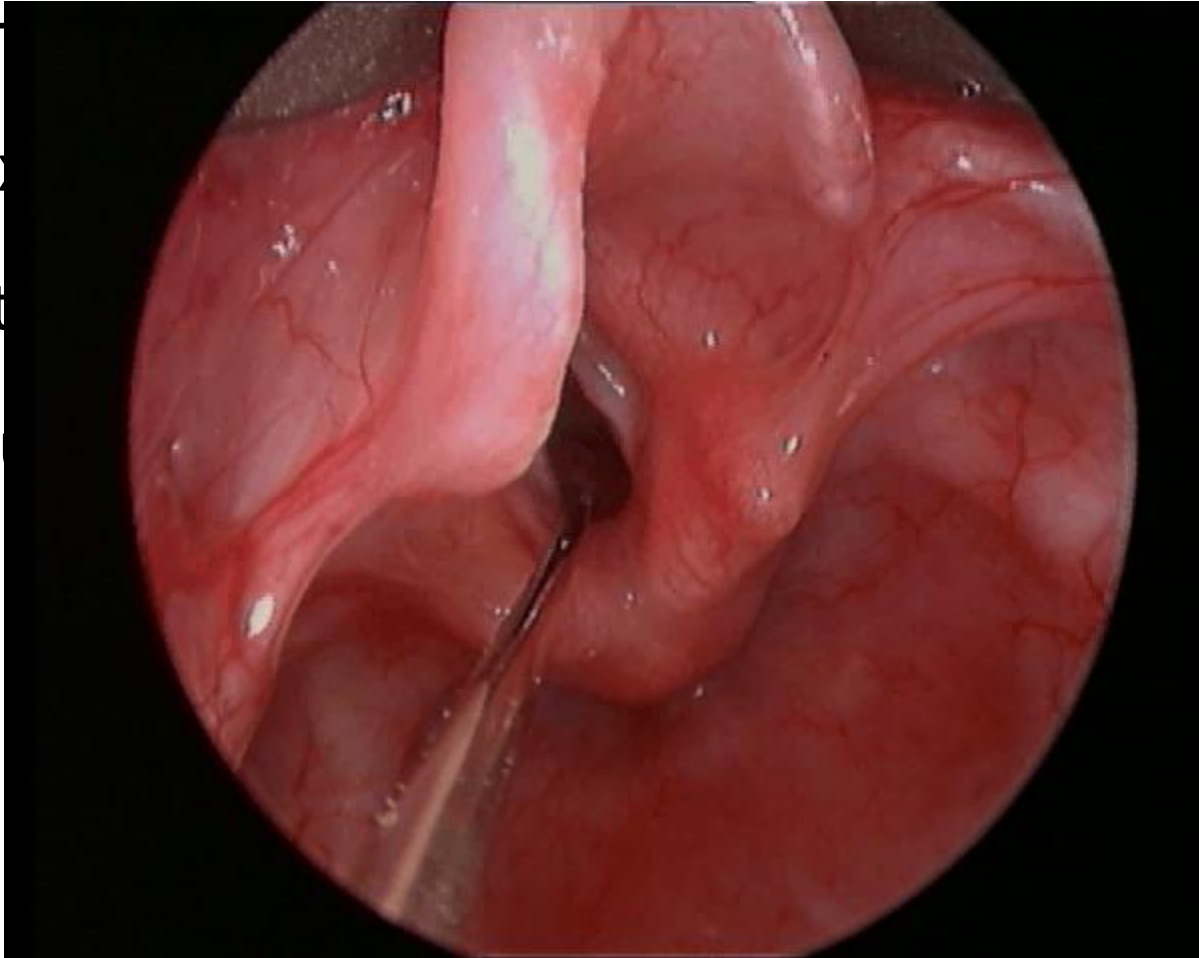
Surgical management

- Laser
 - CO₂
 - precise, shallow penetration
 - KTP
 - absorbed by red haemoglobin pigment
- *BOTH HAVE RISK OF STENOSIS AND DO NOT HASTEN DECANNULATION*

A review of the current management of infantile subglottic haemangioma, including a comparison of CO(2) laser therapy versus tracheostomy. Bailey, Albert et al 2002

Surgical management

- Injections
 - Dex
 - Oft
 - Int
 - Fai

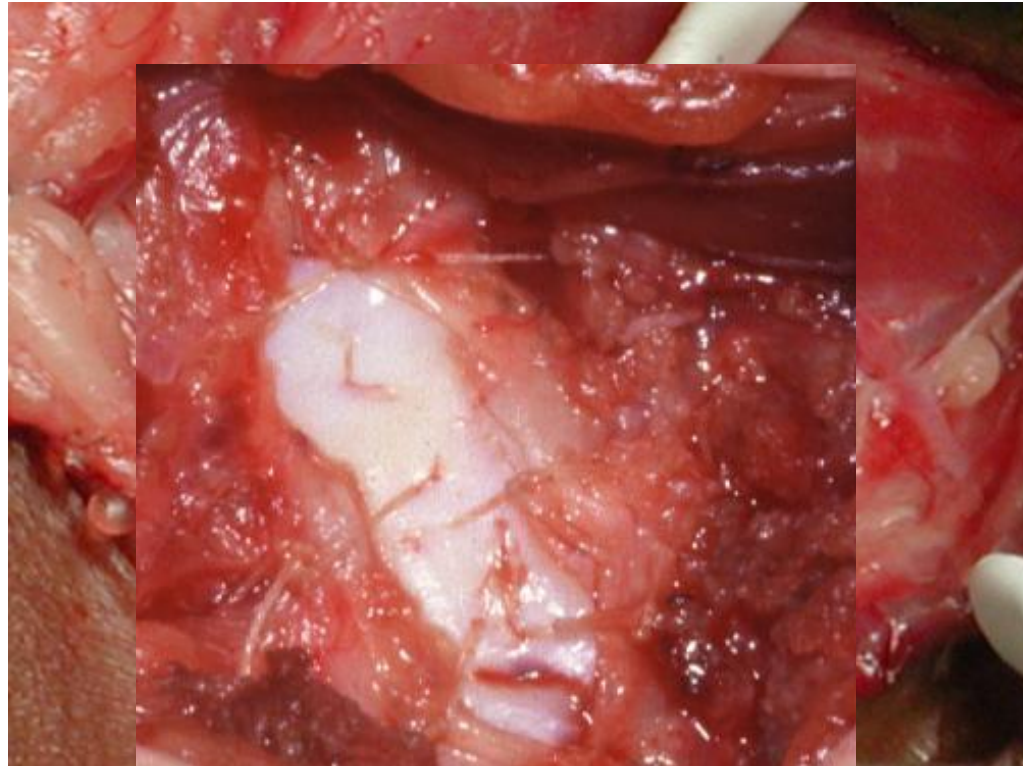


at

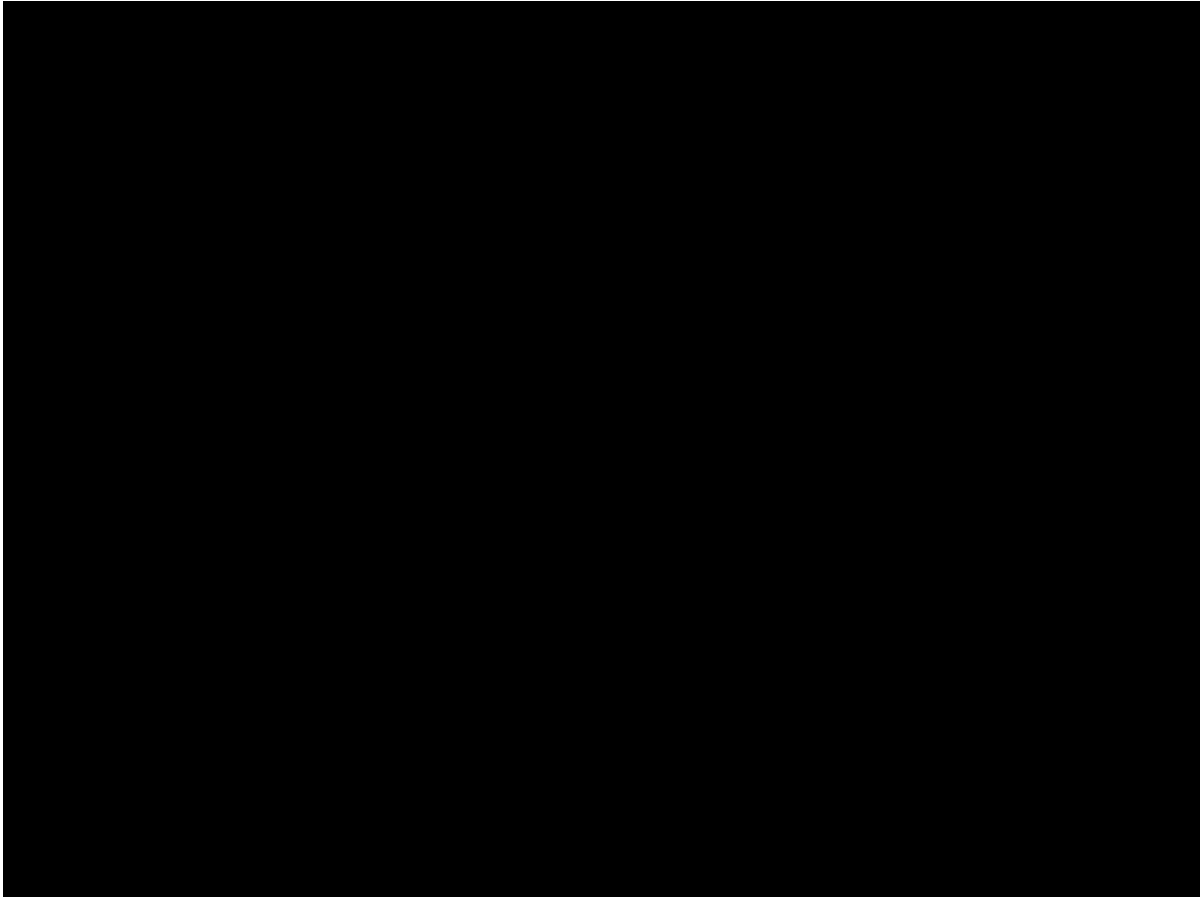
Surgical management

- Open excision
 - Mawson 1961(King's college Hospital)
 - some stenosis
 - Evans 1974 (GOS) combined with LTP
 - Garabedian/Froehlich 1990's
 - submucosal resection combined with grafting to reduce risk of stenosis

Open excision



Endoscopic excision



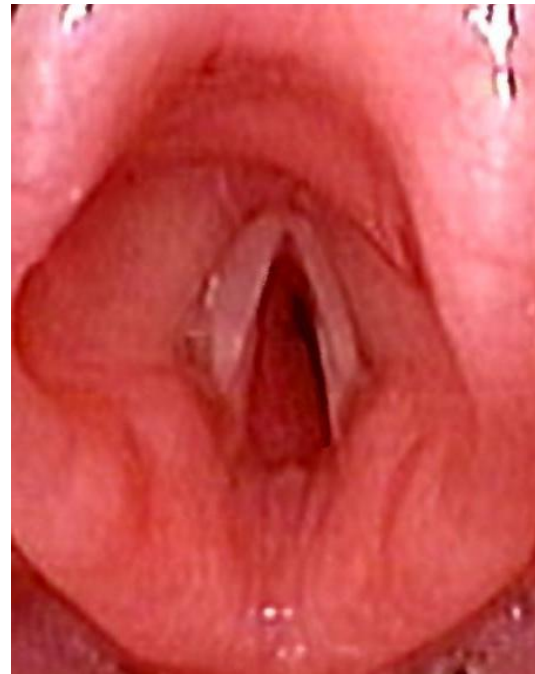
GOS Experience

- Subglottic haemangioma
 - 25 cases in last 5 years

- Tracheal Haemangioma
 - 2 cases

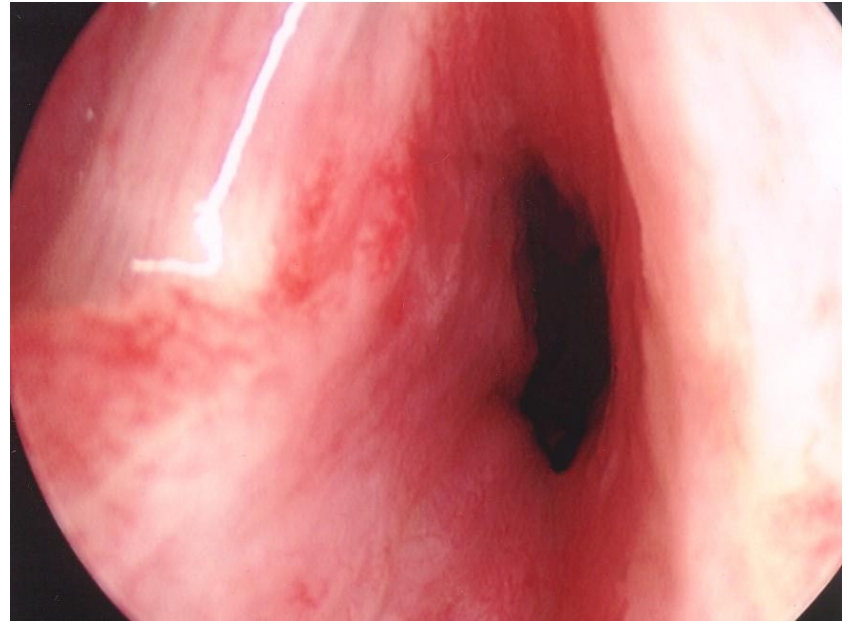
Case LG

- Systemic Steroids
- No tracheostomy
- Quite cushingoid but normal synacten test



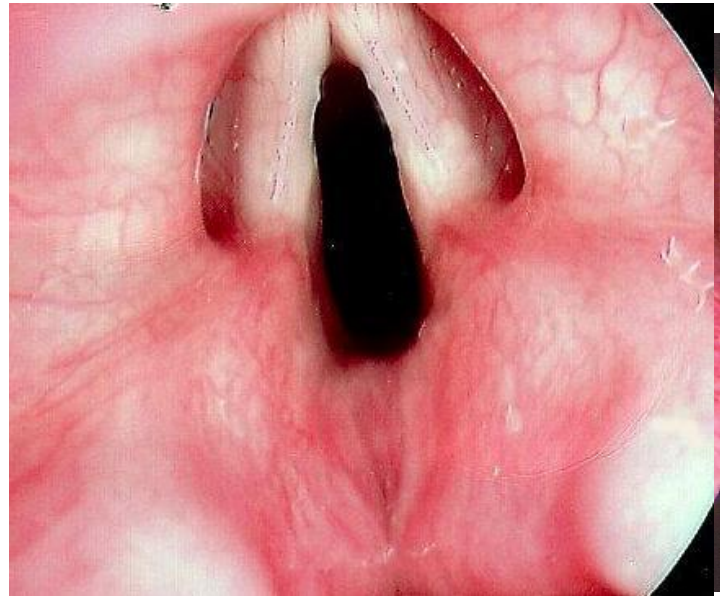
Case BT

- 4 steroid injections
- Required tracheostomy
- then open resection



Case AB

- Tracheostomy at 4 months
- decannulated at 18/12
- TCF closed at 2 ½ years



Case SA

- 2 x injections
 - - failed
- open excision as single stage
 - - successful

GOS management

- Small lesions
 - Observe
 - Occasional limited CO₂ laser
 - Short courses of steroids

GOS management

- Large/circumferential lesions
 - Propanalol
 - Primary excision
 - Open
 - Endoscopic
 - Tracheostomy

