

ASSESSMENT OF STRIDOR IN NEONATE & YOUNG CHILDREN



Supichaya Pojsupap M.D.

Division of Pulmonary and Critical care

Department of Pediatrics

Phramongkutklao Hospital

Outline

- ❖ **Pathophysiology**
- ❖ **Definition**
- ❖ **S&S of stridor**
- ❖ **Differential diagnosis**
- ❖ **Management**

Stridor

- **Stridor: (Inspiratory stridor)**
 - Musical, high-pitch sound produced by oscillations of upper airway structure
 - Rapid turbulent air flow through narrowed segment of respiratory tract (most extrathoracic)
 - Indicates upper airway obstruction, partial
- **Hoarseness:** involvement of vocal cords
- **Respiratory distress / suprasternal retraction**

Poiseuille's Law

$$R = \frac{8nl}{\pi r^4}$$

R = airway resistance

l = length of airway

n = viscosity of gas

r = radius of airway

Poiseuille's Law

Normal

Edema
1 mm.

Resistance
 $R \propto \frac{1}{\text{radius}^4}$

X-section
area

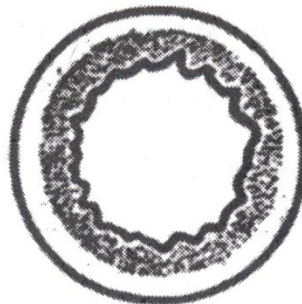
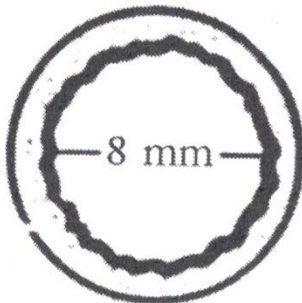
Infant



16X

75%

Adult



3X

44%