



ชมรมโรคระบบหายใจและเวชบำบัดวิกฤตในเด็กแห่งประเทศไทย

ร่วมกับ ยูโรดรัก ลาบอราทอรีส์

Role of Theophyllines in control of Asthma

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สถาบันสุขภาพเด็กแห่งชาติมหาราชินี

Doxofylline

- Last generation methylxanthine derivative for airway obstructions
- **Markedly lower affinity for adenosine receptors**
- As effective as the conventional methylxanthines being a bronchodilator with lower risk of adverse reactions

Doxofylline

- Shows favorable anti-inflammatory effects in the airways
- Retains the inhibitory action on PDE-4 due to its chemical structure (methylxanthine + dioxolane substitution)
- No need for monitoring plasma drug levels

Tolerability of doxofylline in the maintenance therapy of pediatric patients with bronchial asthma

- 806 patients, aged 3-16 yo.
- Doxofylline (200mg sachets) 100-400 mg/d – 6 mg/kg/d q 12 hr
- More than one-half of the patients received 3 or more drugs
- Reported side-effects 11%
 - GI 76%, CNS 16%, palpitation 9%

Doxofylline-Clinical efficacy in reducing weekly salbutamol consumption

In a multicentre, randomised trial on adult patient with COPD given either doxofylline 400 mg b.i.d or Theophylline 300 mg b.i.d for 28 days

Consumption of salbutamol



A bar chart with a light blue background and a black horizontal line at the top. The chart compares the percentage reduction in salbutamol consumption for two groups. The Doxofylline group shows a 47% reduction, represented by a bar extending from the left. The Theophylline group shows a 38% reduction, represented by a bar extending from the right. The bars do not overlap.

Group	Reduction in Salbutamol Consumption (%)
Doxofylline	47%
Theophylline	38%

Doxofylline - 47%

Theophylline - 38%

Doxofylline significantly decreased concurrent Salbutamol consumption