

From Reuters Health Information Inhaled Steroids Linked to Risk of Diabetes



By Bob Saunders

NEW YORK (Reuters Health) Oct 12 - The use of inhaled corticosteroids, whether for asthma or chronic obstructive pulmonary disease (COPD), increases the likelihood of diabetes onset and diabetes progression, a Canadian team has shown.

In fact, lead author Dr. Samy Suissa told Reuters Health, "The widespread use of inhaled corticosteroids in older people with COPD is unjustified and should be curbed, particularly if these drugs trigger other diseases such as diabetes." They should be "limited to patients with asthma, where these drugs are clearly effective."

Dr. Suissa and colleagues at Jewish General Hospital, Montreal, Quebec, point out in *The American Journal of Medicine* online September 27 that systemic corticosteroids are known to increase diabetes risk, but the effects of inhaled corticosteroids are unknown.

To investigate that point, the team analyzed information from Quebec health insurance databases on 388,584 patients newly treated for respiratory disease from 1990 to 2005 and followed through 2007. During an average follow-up of 5.5 years, 30,167 individuals initiated antidiabetic medication indicating onset of diabetes.

Inhaled corticosteroids were currently used by 15.5% of the diabetic cases and by 11.0% of 301,096 matched controls. Corresponding rates of high-dose corticosteroid use were 3.3% and 1.8%.

"After adjustment for differences in the covariates, current use of inhaled corticosteroids was associated with a significant 34% increase in the rate of diabetes (rate ratio 1.34)," the researchers found. Moreover, the rate ratio with the highest doses of inhaled corticosteroids was 1.64.

"The impact is important," commented Dr. Suissa. "It translates into an additional 5 cases of diabetes per 1000 patients every year from the medication."

Inhaled steroid use also impacted progression of diabetes. Among a subset of 27,416 patients already taking oral hypoglycemic agents, 2099 started insulin therapy during follow-up. Current use of inhaled corticosteroids was associated with a 34% increase in the rate of diabetes progression, according to the report.

So, how can the risk of inhaled corticosteroid be minimized? "For asthma, these drugs are clearly effective: patients using high doses should be assessed for possible hyperglycemia and the lowest effective dose targeted," Dr. Suissa advised. "For COPD, their effectiveness is questionable: restrict their use to the few patients for whom they are indicated."

Am J Med. Posted online September 27, 2010. [Abstract](#)

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