



Health | Thu Apr 23, 2015 2:21pm EDT

Related: HEALTH

Common asthma steroids linked to side effects in adrenal glands

BY LISA RAPAPORT

(Reuters Health) - After stopping steroids commonly prescribed for asthma and allergies, a significant number of people may experience signs of malfunctioning in the adrenal glands, a European study finds.

So-called adrenal insufficiency can be dangerous, especially if the person's body has to cope with a stress like surgery, injury or a serious illness, the study authors say.

"The takeaway message of the study is that in corticosteroid use there is a substantial risk of adrenal insufficiency," senior author Dr. Olaf Dekkers, an endocrinologist at Aarhus University in Denmark, said by email. "Patients should be aware of this risk and be informed about potential symptoms."

Those symptoms can include fatigue, dizziness, weight loss and salt cravings, the authors write in the Journal of Clinical Endocrinology and Metabolism.

Corticosteroids are man-made drugs designed to mimic the hormone cortisol, which the adrenal glands produce naturally. The drugs are usually used to counter inflammation in a wide range of conditions, including asthma, psoriasis, rheumatoid arthritis, lupus, blood cancers and organ transplants.

People with adrenal insufficiency do not make enough of two hormones, cortisol and aldosterone. Cortisol helps the body respond to stress, recover from infections and regulate blood pressure and metabolism. Aldosterone helps maintain the right amounts of salt, potassium and water in the body.

While on steroids, the body often produces less of these hormones naturally, and after coming off the drugs it can take a while for natural production to ramp back up. The result is adrenal insufficiency, which can be treated with medication to replace cortisol or aldosterone.

Dekkers and colleagues analyzed 74 research articles published from 1975 to 2014, covering a total of 3753 study participants, to see how different doses and types of corticosteroid treatment might impact the likelihood of developing adrenal insufficiency

Custom Branded Notebooks

Up to 80% Off - Free Shipping. Low Price Guarantee. Compare Us.

TRENDING ON REUTERS

after treatment.

Researchers found the risk of adrenal insufficiency was highest when corticosteroids were taken orally or injected, and lower with inhaled, nasal or topical treatment.

When they looked just at patients using steroids for asthma, the researchers found that the risk of adrenal insufficiency was about 7 percent with inhaled corticosteroids, but about 44 percent with other formulations including oral medication.

Only about 2 percent of asthma patients on the lowest dose of steroids experienced adrenal insufficiency, compared with about 22 percent on the highest doses.

Similarly, slightly more than 1 percent of asthma patients on short-term steroids developed adrenal insufficiency, compared with about 27 percent on long-term treatment.

There is no way to safely halt treatment with corticosteroids that can rule out the potential for adrenal insufficiency, Dekkers said.

The side effect is more likely when patients take higher doses of steroids or remain on treatment for longer than three weeks, said Dr. Roberto Salvatori, medical director of the pituitary center at Johns Hopkins Hospital in Baltimore.

"It's likely, and it's often overlooked because most often the people who prescribe corticosteroids aren't endocrinologists; they are in other specialities and they don't recognize the symptoms of adrenal insufficiency," said Salvatori, who wasn't involved in the study

He gives his patients on corticosteroids medical identification bracelets or necklaces to wear so they can be identified as at risk for adrenal insufficiency in an emergency. "This is a very important issue that's not on the radar screen," he said.

To be sure, more physicians are aware of the risk now than in the 1970s, and the standard doses and durations of corticosteroid treatment have been reduced in part because of this risk, said Dr. Douglas Coursin, a professor at the University of Wisconsin School of Medicine and Public Health in Madison. He, too, advises medical alert bracelets for patients on long-term or high-dose treatment.

"In the past, patients with asthma, certain immune diseases, those receiving some cancer therapies and those who had a solid organ transplant received higher doses for longer periods of time," Coursin, who wasn't involved in the study, said by email. "Overall, I think the risk may be lower than outlined in the study because of practice changes."

SOURCE: bit.ly/1PJRHYw Journal of Clinical Endocrinology and Metabolism, online April 6, 2015.

- 1 [Islamic State takes responsibility for Texas cartoon exhibit attack](#) VIDEO
- 2 [Fed's Yellen says met firm at heart of leak probes](#)
- 3 [Sheryl Sandberg's husband Goldberg died after hotel gym accident: official](#)
- 4 [France's Le Pen disowns daughter after party suspension](#)
- 5 [U.S. trade data points to first-quarter economic contraction](#)

Sponsored Financial Content 🔍 (?)

What Are the Opportunities for Stocks in 2015? J.P. Morgan Funds

\$400? Credit Card Intro Bonuses Are Getting Crazy Next Advisor

The Federal Reserve's next meeting could trigger a global meltdown Weiss

We reveal the stock that pays you 44.51% just for being a shareholder Oxford Club

Brilliant Mortgage Payoff Plan that Expires This Year Bills.com

OPINION



Healthy, high-fat diet may be a pipedream

A much-hyped new study, conducted with just 150 participants, calls for us to "embrace fat" — even the saturated kind. The alleged benefits? Weight loss and, most incredibly, healthier hearts. But the truth is the jury is still out. [Commentary »](#)

Sponsored Financial Content



- **What Are the Opportunities for Stocks in 2015?** *J.P. Morgan Funds*
- **This Extremely Brilliant Way to Pay Off Mortgage Has Banks On Edge** *Bills.com*
- **7 Outrageous Credit Cards For Those Of Us That Have Excellent Credit** *Next Advisor*
- **1 little-known Apple supplier holds nearly unlimited growth potential** *The Fool*
- **We've uncovered the 10 highest-returning small cap dividend stocks...** *Oxford Club*

SPONSORED TOPICS

1. **Best Retirement Communities**
2. **Top 10 Luxury Vehicles**
3. **10 Best Credit Cards**
4. **2015 Best Cars**
5. **Top 10 Retirement Plans**
6. **Reverse Mortgage Calculator**

Sponsored Topics

- | | |
|-------------------------------------|---------------------------------------|
| 1. Best Online Colleges | 6. Easy Approval Credit Cards |
| 2. 10 Best Cars of 2015 | 7. Life Insurance for Seniors |
| 3. Retirement Annuity Rates | 8. Best Fuel Efficient Cars |
| 4. Online Business Degrees | 9. Reverse Mortgage Calculator |
| 5. Average Retirement Income | 10. 2015 Best SUVs |



[Back to top](#)

- Reuters.com** | [Business](#) | [Markets](#) | [World](#) | [Politics](#) | [Technology](#) | [Opinion](#) | [Money](#) | [Pictures](#) | [Videos](#) | [Site Index](#)
- More from Reuters** | [Reuters News Agency](#) | [Brand Attribution Guidelines](#) | [Delivery Options](#)
- Support & Contact** | [Support](#) | [Corrections](#)
- Account Information** | [Register](#) | [Sign In](#)
- Connect with Reuters** | [Twitter](#) | [Facebook](#) | [Linkedin](#) | [RSS](#) | [Podcast](#) | [Newsletters](#) | [Mobile](#)
- About** | [Privacy Policy](#) | [Terms of Use](#) | [Advertise With Us](#) | [AdChoices](#) | [Copyright](#)

Thomson Reuters is the world's leading source of intelligent information for businesses and professionals.

Our Flagship financial information platform incorporating Reuters Insider

An ultra-low latency infrastructure for electronic trading and data distribution

A connected approach to governance, risk and compliance

Our next generation legal research platform

Our global tax workstation

[Thomsonreuters.com](#)

[About Thomson Reuters](#)

[Investor Relations](#)

[Careers](#)

[Contact Us](#)

Thomson Reuters is the world's largest international multimedia news agency, providing investing news, world news, business news, technology news, headline news, small business news, news alerts, personal finance, stock market, and mutual funds information available on Reuters.com, video, mobile, and interactive television platforms. Thomson Reuters journalists are subject to an Editorial Handbook which requires fair presentation and disclosure of relevant interests.

NYSE and AMEX quotes delayed by at least 20 minutes. Nasdaq delayed by at least 15 minutes. For a complete list of exchanges and delays, please click here.