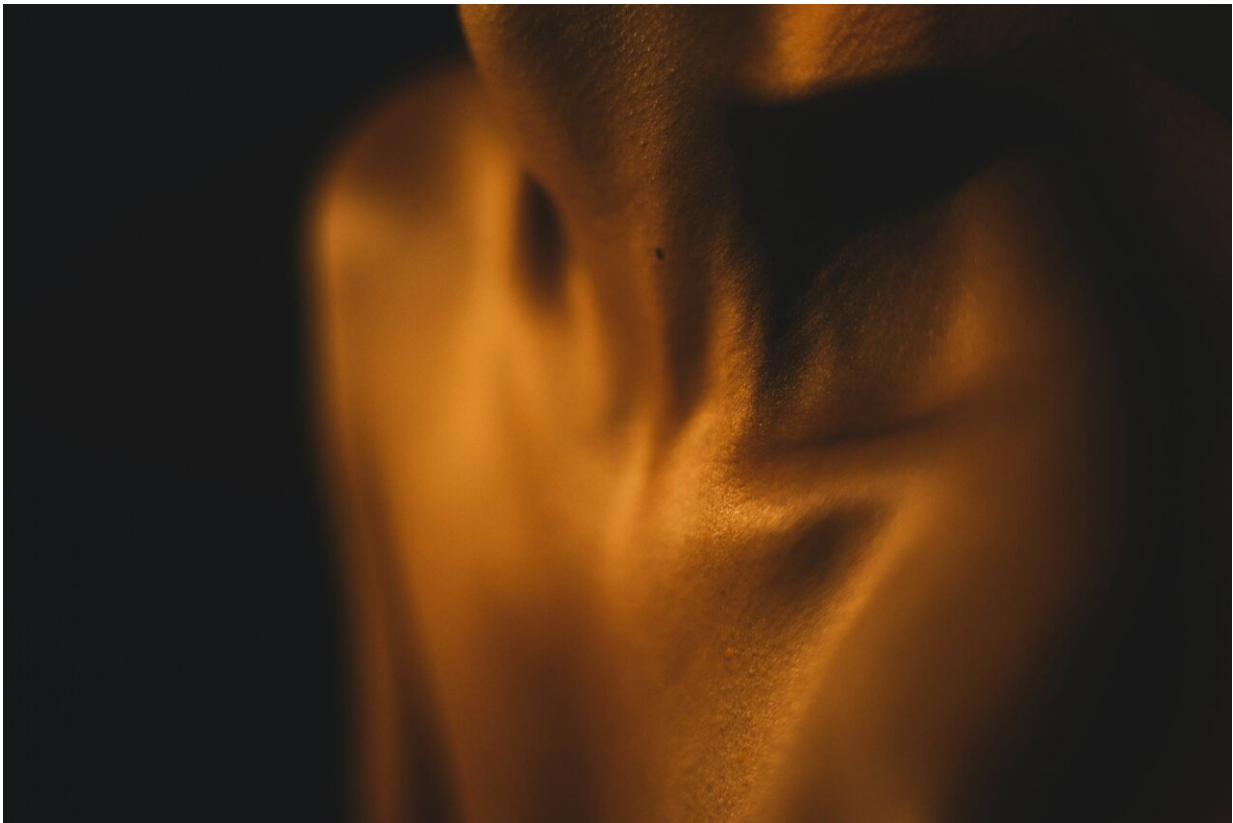


Health warning about body-sculpting drug clenbuterol

March 3 2014, by Fron Jackson-Webb



Credit: Unsplash/CC0 Public Domain

The growing number of Australians illicitly using the drug clenbuterol to lose weight and build muscle mass are putting themselves at risk of heart attack, researchers say.

Clenbuterol is legally prescribed in Australia as an [airway dilator for horses](#). It also has anabolic properties which led to its use in food-producing animals to increase lean meat yield, before it was banned for that purpose in the United States and Europe in the 1990s.

Internationally, a number of [elite athletes](#), such as cyclist Alberto Contador and sprinter [Katrin Krabbe](#), have been caught using clenbuterol as a performance-enhancing drug, despite it being banned by the International Olympic Committee and World Anti-Doping Agency.

The study, published in today's [Medical Journal of Australia](#), shows clenbuterol use has risen in Australia, with calls to the NSW Poisons Information Centre about exposure to the drug rising from three in 2008 to 27 in 2012.

In the nine years to December 2012, hospitals, health-care workers and members of the public reported 63 cases of clenbuterol exposure. At least 53 patients (84%) required hospitalisation.

The calls were from a range of metropolitan and rural areas. The median age was 21 years but the two very young children were inadvertently exposed to the drug, which is usually taken as a liquid or gel.

"Clenbuterol is like a relative of salbutamol, which is what's in ventolin puffers," said Professor Lisa Nissen, head of the School of Clinical Sciences at Queensland University of Technology. The salbutamol in the puffer relaxes the muscles that line the airway, allowing users to breathe more easily, she said.

"With Clenbuterol and that family of medications, they can also have anabolic effects, which means they can build your skeletal muscle or your muscle bulk.

"They can also speed up your basal metabolic rate, and the way that you churn through calories. So not only will you be ripped – you'll get that muscle definition – but you'll also speed up your metabolism."

But on the flip side, they could be toxic to the heart, Prof Nissen said, especially for those with underlying cardiovascular conditions.

"It's like putting a V8 engine in your heart, it's not really built to be sped up at that rate. The consequence, in its extreme, can be a [heart attack](#)."

Prof Nissen said there were a number of other, much less harmful drugs available on prescription for sensible weight loss that could be taken in consultation with medical practitioners.

Lead author Jonathan Brett from the Department of Health at the Royal Prince Alfred Hospital said general practitioners needed to be aware of the harms of clenbuterol use, which are similar to those of stimulants.

"People may report maybe having palpitations, feeling edgy, feeling anxious, and have high blood pressure. If they present with those symptoms and they're dieters or body builders, then I would be asking about the clenbuterol," he said.

"The long-term and short-term safety of clenbuterol for weight loss and body building isn't known, so GPs shouldn't be advising their patients to take it or to continue to take it.

"However, in the spirit of harm reduction, if people *are* going to take it, and they can't be persuaded not to by the GP, what we're seeing from human use for asthma is people shouldn't use more than 20-40 micrograms a day."

But psychologist and sessional academic at Curtin University Stephen

Bright said the small rate of use should not prompt more education about the drug just yet.

"There is a concern that too much information about this drug could actually lead to increased internet traffic and people searching for the drug. By increasing awareness about the drug there could be increased use," he said.

Mr Bright said users primarily sourced clenbuterol online. But while there had been a small increase in people searching for [drug](#) since 2007-2008, there were "no real significant upward trends, unlike the findings reported in the paper".

"We need to consider how we respond to that bigger problem of people being able to access drugs so easily on the internet, be they prescription drugs, performance-enhancing drugs, new and emerging legal drugs and illicit drugs," he said.

Senior lecturer of public health at Deakin University Matthew Dunn said the increase in clenbuterol use was cause for concern but it was important to carefully consider the issue before making rash policy responses.

"We don't have a good picture about performance and image-enhancing drugs generally, let alone specific ones. It's only through conducting studies using case studies of hospital admissions, treatment admissions, or calls to telephone hotlines, that we can start to piece together a picture of what may be occurring."

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