Sanità Informazione (Italy)
Nov. 14, 2024

Editor's note: This English translation was done by a third party. The original digital story can be accessed here. Additionally, this story also appeared in the Italian edition of Popular Science magazine.

Post-Finasteride Syndrome: Side Effects of the Drug that Treats Androgenetic Alopecia Can Last a Lifetime

By Isabella Faggiano

In an interview with Sanità Informazione, Professor Roberto Cosimo Melcangi explains what post-finasteride syndrome is and what its symptoms are: "There is no cure: correct information is, to date, the only way to limit the damage"

It is not uncommon for a drug to have one or more side effects, but it is equally common for these symptoms to disappear within a few days, or in the worst case a few weeks, when the drug is stopped.

However, there are exceptions: this is the case of post-finasteride syndrome (PFS), which is triggered, precisely, following the intake of finasteride, sometimes permanently.

"With my research team"—explains Professor Roberto Cosimo Melcangi, PhD, head of the Neuroendocrinology Unit Department of Pharmacological and Biomolecular Sciences of the University of Milan, in an interview with Sanità Informazione—"we have been studying post-finasteride syndrome for over 10 years, to understand its causes and develop effective treatments. In our experience, we have encountered patients who are affected by PFS even though they have stopped taking the drug for 15 years or more."

What is PFS?

PFS is a rare and complex condition that can develop in some patients after the use of finasteride, a drug used primarily to treat benign prostatic hypertrophy and androgenetic alopecia in men. Finasteride works by inhibiting the enzyme 5-alpha-reductase, thus reducing the conversion of testosterone into dihydrotestosterone (DHT), a hormone involved in prostate and hair growth.

"Initially used for benign prostatic hypertrophy, finasteride's diffusion has increased since the 1990s, a period in which its benefits for androgenetic alopecia were also revealed," adds the professor. The drug, therefore, was no longer used only by men over 50, but also found diffusion among young people and very young people. It is from this moment, in fact, that the side effects emerged with greater evidence."

Symptoms

The typical symptoms of PFS can be divided into three macrocategories:

Sexual, which include decreased libido, erectile dysfunction, reduced genital sensitivity and premature or absent ejaculation.

Neurological symptoms: anxiety, depression, irritability, memory and concentration problems, "brain fog," or a feeling of mental clouding, and sleep disorders.

Finally, physical symptoms: chronic fatigue, muscle weakness, muscle and joint pain, gynecomastia, or development of breast tissue in men, and alterations in urinary function.

“Above all, it’s the side effects affecting the sexual sphere that have turned the spotlight on PFS. When even the youngest people began taking the drug to combat hair loss, the complications—such as erectile dysfunction, lack of libido and ejaculatory disorders—have led these patients to consult an andrology specialist.

“In fact, when the same disorders occur in a man over fifty, they do not so obviously compromise his quality of life and, generally, they worry him less,” explains Melcangi.

“However, many of these young patients do not show hormonal alterations that may be responsible for the observed sexual disorder and for this reason they are directed from andrology to psychiatry, where, identifying depressive symptoms, they are treated with psychotropic drugs.

“This can be more of a problem because antidepressants such as serotonin reuptake inhibitors (SSRIs) or serotonin and norepinephrine reuptake inhibitors (SNRIs) induce symptoms with characteristics similar to PFS, called PSSD (Post-SSRI Sexual Dysfunction),” he adds.

Suicide dramas

Many young people affected by PFS have therefore been bounced from one specialist to another, without ever finding a solution, or even worsening the situation. A problem that has affected people all over the world and has caused many deaths.

“Many young people, no longer able to tolerate the symptoms triggered by PFS, have committed suicide. The parents of these young people who died prematurely have created a foundation, so that what happened—and still happens—would not continue to be silenced,” says Melcangi.

Even today, the exact cause of PFS is not fully understood, “but it is hypothesized that it may be linked to persistent changes in particular hormones (such as neurosteroids) and/or epigenetic changes induced by the drug that alter endocrine regulation and neurotransmission. This syndrome remains the subject of study and controversy, since not all patients who take finasteride experience the symptoms and the mechanisms underlying the condition are not yet well defined” says Melcangi.

Even the incidence of the pathology has not yet been calculated precisely: “It is estimated that 5% of patients who have taken the drug suffer from PFS. According to these percentages, it can therefore be considered a rare pathology,” he adds.

Treatment and information

Treatment of PFS is often difficult and focuces on managing symptoms, using strategies such as psychotherapy, hormone treatments, drugs for erectile dysfunction and psychological support for mental and physical symptoms.

“While waiting for a treatment to be developed that can cure patients with the syndrome, there is only one way to stem the phenomenon: increase awareness of the negative effects of the drug. Today, PFS is also included among those indicated in the product leaflet. But the hope is to be able to identify markers that can predict whether a person, taking the drug, will develop the syndrome or not.

“In the meantime, among the possible solutions, certainly the drug should be taken under strict medical supervision. Currently, it’s easily available, even online. This encourages incorrect self-medication behavior, especially among young people who suffer from alopecia.

“However, everyone, especially those who take the drug for mild hair loss, should be informed about the possibility of developing serious side effects—capable of compromising the quality of life forever,” Melcangi concludes.