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Case Report

Undesirable Effect of Natural Antiperspirant Based on Alum Stone

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Abstract

Natural antiperspirants are used by many people to avoid the unpleasant smell of perspiration, but this practice, which is very common among some people, is not without risk. We report 2 cases of acute hidradenitis caused by natural antiperspirants based on alum stone and talc.

Keywords: Alum stone; Antiperspirant; Acute hidrosadenitis

Introduction

Toutiya is a natural deodorant powder, composed of musk, Alum stone and Toutiya stone, a Moroccan stone with antibacterial properties that neutralizes unpleasant odors. This preparation, widely used in oriental countries, is used to effectively combat the bacteria responsible for unpleasant odors; Talcum powder is sometimes added to this preparation for its absorbent and mattifying properties. The use of this traditional preparation is not without risk: we have reported two cases of Toutiya being used with acute hidrosadenitis.

Observation

We report the case of two patients aged 50 and 55 years with no previous history who reported painful erythematous lesions in the armpits for 1 week (Figure 1,2), in the history we noted



Figure 1: Axillary nodule with pus discharge on pressure.



Figure 2: Axillary nodule with pus discharge on pressure. the use of Toutiya with talc, on clinical examination we noted painful erythematous nodules with emergence of pus on pressure which led us to make the diagnosis of acute Hidrosadeni-

Discussion

tis.

Antiperspirants are composed of aluminum salts, sometimes combined with zirconium salts. Aluminum salts have the ability to precipitate, and their astringent action enables them to shrink the diameter of sweat ducts, thus reducing the flow of sweat. Bacterial flora is also locally inhibited. Aluminum chlorohydrate is the most common antiperspirant today, but many other aluminum salts are still in use. Despite the 0.6% limit on pure aluminum in antiperspirants, these are still implicated in contact eczema, irritation, breast cancer, Alzheimer's disease,

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Parkinson's and other degenerative diseases, encouraging people to turn to natural antiperspirants, namely alum stone. While the aluminum content of natural alum stone appears to be lower than that of conventional antiperspirants, its long-term safety has not yet been proven. Known and used since Antiquity, alum stone does contain aluminum. In fact, it's a double sulfate of aluminum and potassium (Potassium Alum) [1]. It can be found in several forms: either natural, in which case it comes as n the form of a recrystallized mineral extracted from quarries; or synthetic, in which case it's no longer composed of Potassium Alum, but of ammonium aluminum sulfate (Ammonium alum). Naturally astringent, it clogs pores and sweat glands, mechanically limiting perspiration and the odors associated with it. Whether natural or synthetic, alum stone contains aluminum salts recognized as toxic by scientists. Although alum stone is well tolerated most of the time, certain sensitive skins can be irritated by it, as was the case with our two patients who used this stone in association with talcum powder, which potentiates the occlusive effect on pores and sweat glands and increases the risk of complications. talc is actually magnesium silicate powder, a natural mineral in the same family as clay. Talc's absorbent properties enable it to eliminate excess sebum from skin and hair. It also forms a protective film on the skin, protecting it from dehydration and external aggression [2].

Conclusion

The use of the traditional preparation Toutiya mixed with talc is at risk of complications such as acute hidrosadenitis.

References

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