Signs suggestive of allergic reaction to etonogestrel-releasing contraceptive implant

Sinais sugestivos de reação alérgica ao implante contracetivo de libertação de etonogestrel

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Abstract

The etonogestrel implant is a subdermal contraceptive that releases etonogestrel. It is one of the most effective contraceptive available and moderate or severe side effects rarely occur. The authors present a case of allergic reaction to one of the components of the etonogestrel implant, about 72 hours after had been inserted. The symptoms resolved after its extraction.

Keywords: Adverse effects; Drug hypersensitivity; Etonogestrel; Subdermal contraceptive.

Resumo

O implante de etonogestrel é um contracetivo subcutâneo que liberta etonogestrel. É um dos contracetivos mais eficazes disponíveis e raramente ocorrem efeitos adversos moderados ou graves. Os autores apresentam um caso de uma reação alérgica a um dos componentes do implante de etonogestrel, cerca de 72 horas após a sua inserção. Os sintomas desapareceram após sua extração.

Palavras-chave: Efeitos adversos; Hipersensibilidade a fármacos; Etonogestrel; Contracetivo subcutâneo.

The etonogestrel implant is a subdermal, single-rod contraceptive that releases etonogestrel[1]. It is considered a very effective and safe contraceptive and moderate or severe side effects rarely occur[2-4]. We describe a case of allergic reaction to etonogestrel implant that resolved after its extraction.

A a 23-year-old African woman (gravida 0, para 0) presented at our emergency department with severe pain, erythema and difficulty moving the right arm about 72 hours after the etonogestrel-releasing implant had been inserted. The implant had been inserted under local anesthesia with 2% lidocaine in our department. The patient denied history of arm trauma or injury as well as fever or respiratory symptoms. The woman had no relevant medical history, including allergies.

A clinical examination was performed and revealed a skin lesion located on the right arm, around the etonogestrel-releasing implant introduction site. The site, 50 mm long, was characterized by an oval edema with an irregular contour and an erythematous halo associated with intense pain on palpation (Figure 1A). The implant rod was correctly placed and was palpable.

The implant was easily removed according with the standard recommendations. Additionally, 1cc of lidocaine was introduced in the contralateral arm to assess

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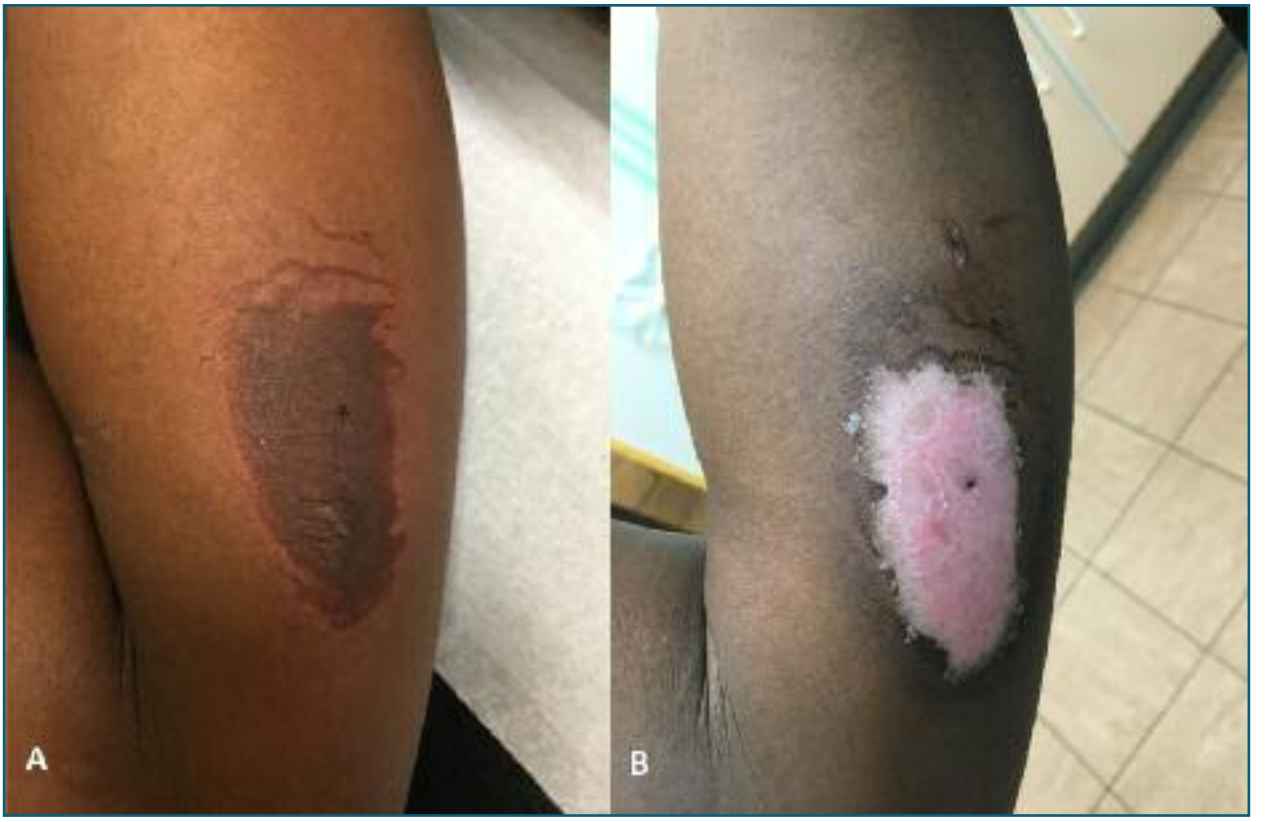

FIGURE 1. (**A**) Skin lesion around the etonogestrel-releasing implant introduction site. (**B**) Follow-up a week later: skin with no signs of inflammation.

a possible hypersensitivity reaction to that drug. None additional medical therapeutic was done.

The patient was reevaluated a week later and reported clear improvement in symptoms. Upon observation, the original skin lesion was now scaly, painless and with no signs of inflammation (Figure 1B). Neither the implant extraction point nor the lidocaine injection point (contralateral arm) presented any changes.

The etonogestrel implant is a subdermal, single-rod contraceptive that releases etonogestrel. Each implant contains 68 mg of the active substance etonogestrel, ethylene vinyl acetate copolymer, barium sulfate and magnesium stearate[5]. The occurrence of local adverse reactions are described in the literature, however moderate or severe side effects rarely occur[1].

We describe a case with local signs and symptoms progressive and severe, completely solved after the extraction of the implant. The clinical presentation strongly correlated with an allergic reaction to one of the components of the etonogestrel implant, which is rare[2-4].

The etonogestrel implant is highly regarded for its efficacy and safety, which is reflected in its wide worldwide use. However, the risk of allergic skin reaction should not be overlooked.

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AUTHORS CONTRIBUTIONS

MLR wrote the article. EL contributed to the interpretation of the data, revision and final approval of the manuscript.

CONFLICTS OF INTEREST

Authors have no conflict of interest.

DETAILS OF ETHICS APPROVAL

Written informed consent was obtained.

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RECEIVED: 11/02/2022
ACCEPTED: 10/03/2022