ERYTHEMA NODOSUM
(Report of two cases of erythema nodosum due to oral contraceptive)

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Summary

Two cases of erythema nodosum probably due to oral contraceptives containing norgestrol and ethinyl oestradiol are reported. In one case, the skin lesions appeared one month after initiation of drug therapy. This seems to be the shortest latent period so far reported between oral contraceptive drug therapy and appearance of erythema nodosum.

Erythema nodosum is characterized by an acute, transitory eruption of erythematous, tender skin nodules often associated with constitutional symptoms like fever and joint pains. It is caused by a variety of agents; drugs being one of them. Etiological relationship between a drug and erythema nodosum is often questionable; but several drugs like sulfonamides, iodides and bromides have been convincingly shown to produce it[1]. Oral contraceptives have been more recently incriminated as one of the drugs which causes erythema nodosum[2-6].

We are reporting two patients with erythema nodosum probably caused by oral contraceptives.

Case No. 1

A 23 years old female patient presented with recurrent erythema nodosum lesions over the shins for 5 months. She was taking eugynon[R], an oral contraceptive drug containing norgestrol & ethinyl oestradiol for 6 months. There was no history of any other drug intake. Apart from the skin lesions, patient was well.

Cutaneous examination revealed tender, painful, subcutaneous nodules over both shins. Systemic examination revealed no abnormality.

Routine investigations on blood, urine and stools were within normal limits. Radiological examination of chest did not reveal any abnormality.

Case No. 2

A 17 years old female patient presented with recurrent attacks of erythema nodosum lesions of 1½ months duration. She did not give any history suggestive of sore throat, or joint pains. She was on oral contraceptive, eugynon[R] containing norgestrol and ethinyl oestradiol for 7 months.

Cutaneous examination revealed tender, painful, erythematous, subcutaneous nodules over both shins.

Routine investigations on blood, urine and stools were within normal limits. Radiological examination of chest did not show any abnormality.

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Discussion :

In 1965, Holcomb[2] reported a patient with erythema nodosum, who was on oral contraceptives (norethynodrel and ethyl estradiol). In 1968, Baden & Holcomb[4] reported another case of erythema nodosum who was also taking oral contraceptive pills. They suggested that the progestational component of oral contraceptives could be the cause of erythema nodosum. However, Savel et al in 1970 demonstrated that in two of their cases, the addition of mestranol (in vitro) to the cultures of their peripheral blood lymphocytes resulted in stimulation of lymphoblast formation as measured by the uptake of tritiated thymidine. The test was negative with progestin. On the basis of this they suggested that erythema nodosum could be due to hypersensitivity to the oestrogen component of oral contraceptive pills.

Latency between the development of an allergic reaction and the first exposure with a drug is well known. This latent period is extremely variable. Periods ranging from 3 months to 21 months have been reported with oral contraceptives and erythema nodosum[2,6,7]. In one of our cases the latent period was only one month – perhaps the shortest so far reported.

References :

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Volume 47, Number 2, 1981, page 86, table 3 : Please read **Trichophyton** instead of Tinea in species column.