The correlation between PaO_2 and serum concentrations of testosterone, FSH, thyroid hormones, and hormone binding globulins suggests a causal association. Normal basal LH and FSH concentrations and normal pituitary responses to injected GnRH in this case and patients with respiratory disease³ suggest hypothalamic suppression, though additional hypoxic testicular suppression seems possible. While thyroid hormone values tended to increase with improved PaO_2 , the rise was less than with testosterone, and in respiratory disease also the hypothalamopituitary-testicular axis seems to be particularly sensitive to hypoxia. Absent TSH responses to injected TRH before weight reduction and their return to normal after diet along with a rise in serum thyroxine concentration suggested reversible pituitary suppression of TSH even though serum thyroxine values were normal throughout. These normal values were also found in occasional instances in our patients with respiratory disease³ in the presence of pituitary suppression of TSH.

- 1 Semple Pd'A, Beastall GH, Watson WS, Hume R. Serum testosterone depression associated with hypoxia in respiratory failure. *Clin Sci* 1980;58:105-6.
- 2 Semple Pd'A, Beastall GH, Hume R. Male sexual dysfunction, low serum testosterone and respiratory hypoxia. *British Journal of Sexual Medicine* 1980;64:48, 53.
- 3 Semple Pd'A, Beastall GH, Brown TM, Stirling KW, Mills RJ, Watson WS. Sex hormone suppression and sexual impotence in hypoxic pulmonary fibrosis. *Thorax* 1984;39:46-51.
- 4 Semple Pd'A, Watson WS, Beastall GH, Hume R. Endocrine and metabolic studies in unstable cor pulmonale. *Thorax* 1983;38:45-9.
- 5 Guilleminault C, Dement WC. *Sleep apnoea syndromes*. New York: Alan R Liss, 1978.

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Fixed drug eruption masquerading as herpes simplex labialis

Drug eruptions are common, but the true incidence is unknown as many are not reported. Fixed drug eruptions are less common and may not be recognised. We report a case that was misdiagnosed as herpes simplex labialis.

Case report

A 38 year old woman took Equagesic tablets (aspirin, meprobamate, and ethoheptazine) intermittently for pain in her leg. She developed an erythematous lesion on the left lateral margin of the lower lip and surrounding skin (figure), which became vesicular and resolved after 10 days leaving faint pigmentation. It recurred one month later, and herpes simplex labialis was diagnosed. During the next six months the lesion recurred five times and was eventually accompanied by similar lesions on the dorsum of her hand, thigh, and abdomen. A challenge test to Equagesic and to meprobamate caused a recurrence of the lesions. There was no recurrence after Equagesic was stopped.

Comment

Fixed drug eruptions characteristically recur at the same sites whenever the offending agent is given. Initially the lesion is erythematous, mildly oedematous, and sometimes vesicular. After seven to 10 days it becomes a dusky violaceous colour, and after repeated attacks the pigmentation may become permanent. Eruptions often occur on the palms and soles but may affect the glans penis and mucous membranes, and the condition comes into the differential diagnosis of oral and genital herpes.¹

The pathogenesis is unknown, but during the acute phase of the eruption a factor was identified in the serum of 21 affected patients

that induced lymphocyte transformation.² Skin transplanted from an affected site to a non-affected site loses its capacity to react, while normal skin transplanted to an affected site becomes reactive.³

Fixed eruption on left lateral margin of lower lip caused by ingestion of Equagesic.

Fixed drug eruption should be considered when lesions recur at the same site. The drugs associated with fixed drug eruption are as follows:

Commonly implicated

Barbiturates	Sulphonamides
Phenolphthalein	Tetracyclines
Phenylbutazone	

Less commonly implicated

Acetarsol	Hydroxyurea
Acriflavine	Isoaminile citrate
Amidopyrine	Meprobamate
Amoxycillin	Methaqualone
Ampicillin	Metronidazole
Amylobarbitone	Minocycline
Arsenicals	Nystatin
Aspirin	Oxyphenbutazone
Atropine	Paracetamol
Bisacodyl	Penicillins
Buthalitone	Phenacetin
Butobarbitone	Phenazone
Carbromal	Phenobarbitone
Chloral hydrate	Phthalylsulphathiazole
Chlordiazepoxide	Quinine
Chlormezanone	Salicylates
Chlorphenesin carbamate	Succinylsulphathiazole
Codeine	Sulphadiazine
Co-trimoxazole	Sulphadimethoxine
Cyclizine	Sulphadimidine
Dapsone	Sulphamerazine
Dimethylchlortetracycline	Sulphamethoxazole
Diphenhydramine	Sulphamethoxydiazine
Dipyrrone	Sulphamethoxypyridazine
Disulfiram	Sulphaphenazole
Emetine	Sulphathiazole
Erythromycin	Sulphobromophthalein
Glutethimide	Trimethoprim
Griseofulvin	

- 1 Baker H. In: Rook A, Wilkinson DS, Ebling FJG, eds. *Textbook of dermatology*. 3rd ed. Oxford: Blackwell Scientific Publications, 1979:1121-2.
- 2 Gimmez-Camarasa JM. Lymphocyte transformation test in fixed drug eruption. *N Engl J Med* 1975;292:819-21.
- 3 Bruinsma W. *A guide to drug eruptions*. 3rd ed. Oosthuizen, Netherlands: De Zwaluw, 1982:63-7.

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