A TONIC WITH RATHER UNPLEASANT SIDE EFFECTS

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It was with a great deal of apprehension and dismay that Samuel Brown, a factory worker, aged forty two (42), and a father of four children, saw Christmas approaching. Not that Mr. Brown had anything against Christmas, but this unhappy man and for reasons none too obvious to himself or for that matter, to his general practitioner, the previous two Christmases had been marred by an embarassing and most uncomfortable problem: his scrotum had suddenly swelled up and become extremely pruritic, completely ruining the holiday period in the process. On both occasions he had improved after about two weeks, helped perhaps by a medicated powder prescribed by his doctor. He had been perfectly well throughout the rest of the year.

The patient's doctor had diagnosed the condition as first a "Sweat Rash" and subsequently "probably due to nerves" but as neither could dig out any good psychological explanation for this curious seasonal nerve-rash, the patient was referred for dermatological consultation to prevent a further recurrence if possible.

The patient had previously been well and there was no family history of Diabetes. Examination did not reveal any positive clinical findings. There was no history of drug ingestion whatsoever, and he did not smoke, nor drink and neither did he partake of Liquorice or Saccharin.

A fixed drug eruption was suspected, but questioning failed to reveal any of the more common causes (see table). Because of the "temporal profile" of events and the patient being a teetotaller, Phenolphthalein first came under suspicion perhaps being ingested in the icing of Christmas cake, etc. However, challenge with an oral dose caused no undue side effect.

Finally the diagnosis mas made: the patient was indeed a teetotaller, but contrary to his usual custom of drinking only fruit squashes, in the numerous office parties held in the festive season, he would have a glass of colourless Tonic Water, so as not to be seen with fruit squash in the company of much less soberly inclined companions.

Tonic Water is known to contain Quinine, a widely reported cause of fixed eruptions, and surely enough challenging the patient with Tonic Water orally, (but not as an occlusive patch test) resulted in an immediate relapse of his itchy problem. He was advised to avoid all quinine containing beverages and has since spent two perfectly happy Tonic-Waterless Christmases.

A fixed eruption is a recurrent one that always appears in the same site(s) following administration of the offending agent. Its extent may increase/decrease slightly from time to time, and it may appear soon after a drug is started or several months later. (Welsh 1961).

The manifestations are usually cutaneous but occasionally confined to the mucosae. In the skin the common appearance is of hyperpigmentation (subsequent to several inflammatory episodes) with occasional re-exacerbations of severe pruritus.

Sometimes, the lesions may resemble urticaria, erythema nodosum and even alopecia areata. In negros diffuse hypermelanosis may be the presenting symptom. In the mouth, bullous lesions of pemphigoid appearance may break down to form local erosions.

The mechanism of fixed eruptions form a fascinating study. There appears to be an acquired highly specific local sen-

Causes of Fixed Drug Eruptions
(Common Offenders Underlined)
Adapted from Welsh 196.

I	Antipyretics	Aspirin Phenyl Butazone Oxy Phenbutazone Codeine
II	Phenolphthalein	In all its guises
III	CNS Depressants	Barbiturates Tranquillizers: Librium
IV	Anti Microbials	Antihistamines Anti Convulsanis Sulphas Tetracyclines
	Antimalarials	Quinine
V	Autonomic Nervous System	Both Sympatholytics — Mimetics
VI	Miscellaneous	Digitalis Peritrate Liquorice Saccharin White Wine Lentils Egg White

sitisation probably dependent more on cellular rather than humoral responses. Localised sensitisation would seem to occur if only the immune cells of the dermis are involved as opposed to the universal sensitisation occuring following participation of lymph nodes; e.g. poison ivy dermatitis. In favour of this theory in the fact that if full thickness skin grafts are interchanged between the site of a fixed eruption. (A) and normal (B) the site of the fixed eruptions will move from (A) to (B) and will recur only at (B) on the next occasion. (Porter & Comaish 1969).

Although any drug can cause a fixed eruption in the occasional patient, some are certainly more notorious than others in this respect. The classical rarely overlooked allergen is phenolphthalein, but it must be remembered that apart from laxatives, this is also an ingredient of sweets, icing, and toothpaste. Other well recognized causes include all antipyretics, especially phenylbutazone and codeine, antibiotics particularly tetracyclines and sulphonamides, and barbiturates. (Welsh 1961). Chlordiazepoxide (Librium) and Oxyphenbutazone (Tanderil) are among the more recent additions. (Savin 1971).

A patient with a fixed eruption due to quinine contained in Tonic Water is described. Fixed eruptions are uncommon but not rare. They are usually not difficult to diagnose once the possibility is considered. A long and detailed history with subsequent re challenging (orally) with the suspected offending agent offers the best means of diagnosis although a 48 hour occlusive patch test at the site of the eruption sometimes may also be useful. (Strizler & Kopf 1960).

A refractory period may be present

when even oral exhibition of the offending agent fails to induce a flare up. (Browne 1964).

References

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