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THE EFFECT OF ASPIRIN IN CHRONIC URTICARIA.

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A FEW individuals react to aspirin by developing urticarial weals and giant swellings which may represent true allergy to aspirin. However, in a series of patients with chronic urticaria from various causes, some developed an obvious increase in the weals and swellings after taking aspirin and these exacerbations of existing urticaria are difficult to explain on an allergic basis.

Under the heading of chronic urticaria I include patients in whom the condition has been present for at least six weeks. Papular urticaria of childhood, cholinergic, cold or actinic urticaria and dermographism are not included. Giant urticaria (angio-neurotic oedema) commonly occurs in patients with dermal weals, but cases with giant swellings alone are excluded.

During the past three years, seventy patients with chronic urticaria have been studied with regard to the effect of aspirin. Twenty of these gave a history of exacerbations of weals and giant swellings shortly after taking aspirin in various forms. The exacerbations settled down in a few days to the degree of urticaria prior to taking the aspirin. Test doses of aspirin varying from 5-15 grains were then given to the patients and sixteen out of the twenty showed an obvious increase in the eruption. Six more cases without such a history also reacted in this way to the test doses. The patients were next tested with sodium salicylate which gave the same results as aspirin.

The effect of aspirin and sodium salicylate appeared to be quantitative. It was greater if larger doses were used. This was sometimes apparent clinically when a patient with chronic urticaria had taken an occasional aspirin without any obvious trouble, but at another time took much more, and had a severe exacerbation. The effect was also more noticeable during phases when the underlying urticarial tendency was greater. Thus in a patient with severe wealing from chronic urticaria, a small dose of aspirin such as $2\frac{1}{2}$ grains produced a severe exacerbation, whereas in the same patient at a later stage, when the wealing tendency was less, as much as 15 grains hardly showed any effect.

DISCUSSION

The most likely explanation of this effect of salicylates seems to be that they act as **histamine liberators**. In a case of urticaria pigmentosa, Hamrin (1957) showed that attacks of flushing occurred when salicylates were given and suggested that this was due to release of histamine. Other drugs may have a similar effect. For example, it has long been known that morphia and its

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derivatives should be avoided in the treatment of urticaria, as the weals may be increased and morphia is a known histamine liberator (Feldberg and Paton, 1951). The apparent quantitative effect of salicylates would fit in with such an explanation. On the other hand it is not easy to explain why the phenomenon is only present in twenty-two out of seventy patients.

Another possible explanation is linked with the fact that some cases of chronic urticaria appear to start as acute attacks associated with allergy to a drug or food. Thus in ten of the seventy patients mentioned, penicillin in five, anti-tetanus serum in two, crab, tinned fish and an attack of gastro-enteritis in one instance each, appeared to cause acute attacks of urticaria which then continued for months in a state not differing in any way from the other cases of chronic urticaria. Furthermore, two of the ten patients had histories of previous phases of urticaria unrelated to the drug or food in question. I have no real explanation for such acute attacks progressing to the chronic state, but it would seem possible that these patients had a latent constitutional tendency to urticaria which was triggered off by the acute attack. It might be argued that the exacerbations by aspirin in chronic urticaria are due to a similar mechanism, and that there is a true allergy to aspirin in these cases, occurring in patients with a constitutional tendency to urticaria. On the other hand, the phenomenon was noticed in twenty-two of the seventy patients and it seems unlikely that such a high proportion of a selected group of patients would be allergic to aspirin.

Whatever the explanation, patients with chronic urticaria should be advised to avoid salicylates in any form.

SUMMARY.

Twenty-two out of seventy patients with chronic urticaria developed exacerbations of weals and giant swellings after the administration of aspirin or sodium salicylate.

The effect was more obvious when large doses were used and at times when the wealing tendency was greater.

It is likely that salicylates act as histamine liberators in producing this effect.

REFERENCES.

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