Oral Disodium Cromoglycate in Mastocytosis

H. Zachariae, T. Herlin and P. Olholm Larsen

Department of Dermatology, Marselisborg Hospital, University of Aarhus, 8000 Aarhus C, Denmark

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Abstract. Oral disodium cromoglycate was found useful for the treatment of gastrointestinal manifestations of mastocytosis in 2 patients with systemic disease. The urinary excretion of histamine in these 2 patients decreased following treatment. Oral disodium cromoglycate had no effect on cutaneous symptoms, either in these 2 patients nor in 2 other patients with urticaria pigmentosa without signs of systemic mastocytosis. In the latter 2 patients the urinary excretion of histamine was unaffected. Treatment was given for 4 or 6 weeks and the dose of disodium cromoglycate was 100 mg four times daily in the 3 adult patients and 100 mg three times daily in the fourth patient, an 8-year-old boy.

Mastocytosis is characterized by accumulation of mast cells in skin as well as in various internal organs (7). The clinical symptoms are normally attributed to the release of histamine, and elevated histamine levels have been found in skin (4, 13), stomach and gut (3) as well as in urine (10, 14). Until now no effective treatment has been found for the disease, although oral 8-methoxypsoralen together with long-wave ultraviolet irradiation (PUVA) may relieve skin symptoms (1).

Recently some reports have indicated a beneficial effect of oral disodium cromoglycate (DSCG) in mastocytosis (8, 10). We therefore found it of interest to study DSCG in 4 patients with mastocytosis, 2 of whom had symptoms of systemic disease.

MATERIAL AND METHODS

The investigation included 2 men, one woman and an 8-year-old boy with clinically and histologically confirmed urticaria pigmentosa. The woman and one of the men had mild gastrointestinal symptoms and occasional headaches, while the other male and the boy only experienced itching and dermographism on physical trauma. Symptoms and signs of urticaria pigmentosa had been present in all patients for several years. The gastrointestinal symptoms were alcohol intolerance, mild gastrointestinal pain, nausea and, for the male patient, occasional diarrhea.

Urinary histamine was determined spectrofluorometrically (6) prior to and following treatment with oral DSCG. The adult patients received 100 mg DSCG four times daily, while the child was treated with 100 mg three times daily. The treatment course together with the results of urinary histamine determinations are shown in Fig. 1.

During treatment, gastrointestinal symptoms disappeared, while none of the patients reported any significant decrease in pruritus, wealing and flushing. None of the patients showed any change in appearance of the skin.

DISCUSSION

Mast cell disease can be divided into cutaneous mastocytosis and systemic mastocytosis. Urticaria pigmentosa, when being a pure cutaneous disease, often starts in infancy, but may also appear in adulthood, in this case often as teleangiectasia macularis perstans (7). Teleangiectasia macularis perstans, however, is also found in systemic mastocytosis. These patients, besides their cutaneous involvement, also have infiltration of internal organs by large numbers of mast cells and their urinary excretion of histamine is elevated (14). Gastrointestinal involvement is not uncommon in systemic mastocytosis (5).
Most symptoms in mastocytosis appear to be related to effects of histamine release. It has therefore been natural to try various types of drugs, which could influence histamine release or act as antagonists. However, neither H1 nor H2 antihistamines have proved very effective (12) and the same appears to be the case with histidine decarboxylase inhibitors (14) and histamine liberators (7).

DSCG is effective in the treatment of allergic asthma, allergic rhinitis and allergic conjunctivitis, in which the drug is believed to act by inhibiting mast cell degranulation locally and thereby histamine release. DSCG is, in our experience (11), of no value in chronic urticaria, probably due to insufficient absorption and therefore lack of effect on cutaneous mast cells. These data have been in general agreement with the results of Denman (2). However, Denman found an effect in a subgroup of patients with dietary hypersensitivity, where urticaria could be related to some extent to histamine release from mast cells in the gastrointestinal tract. Our present data support the idea that oral DSCG acts only on symptoms related to mast cell release from the gastrointestinal tract. This would seem to contradict the data of Soter somewhat (10); they reported a time course effect of DSCG on skin as well as on the central nervous system and gastrointestinal tract in a controlled clinical trial on 8 patients with mastocytosis, but no influence on urinary histamine excretion. Our data tally well with the case reported by Sauder & co-workers regarding the finding of reduced urinary histamine in a 5-month-old boy with systemic mastocytosis treated with oral DSCG.

We feel that our results demonstrate that DSCG is a useful drug in the treatment of gastrointestinal manifestations of mastocytosis, but that in the present dosage it has no effect on cutaneous symptoms.

REFERENCES

One-week Treatment of Chlamydia-positive Urethritis with Doxycycline and Tetracycline Chloride in Males

T. Juvakoski, J. Lauharanta, L. Kanerva and A. Lassus

Department of Dermatology and Venereology, University Central Hospital. Helsinki. Finland

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Abstract. 65 patients with chlamydia-positive urethritis were treated with doxycycline and 59 with tetracycline chloride 1 g/day for one week. All steady sexual partners of these patients were treated with the same regimen during the same period. At control visits 2 and 3 weeks after the beginning of the treatment, all re-examined doxycycline-treated patients and all except 4 tetracycline-treated patients were cured.