

Intravaginal desensitization to seminal fluid

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Key words: allergic reaction; desensitization; seminal fluid; treatment.

• A 37-YEAR-old woman was referred to us for evaluation of postcoital urticaria and dyspnea. She had been married to the same partner for 7 years and had a 5-year-old child. Her first symptoms had started only 6 months before referral. At the beginning, she had urticaria of her hands and face 15-30 min after sexual intercourse, but her symptoms had worsened progressively. At the last two episodes, she developed general urticaria with shortness of breath immediately after sexual intercourse. The symptoms disap-

peared spontaneously after several hours. She never experienced perineal reactions. The use of condoms resolved

the postcoital problem completely. The woman and her husband were healthy with no history of atopy. Physical examination was normal. Prick skin testing with her husband's undiluted semen revealed wheal and flare diameters of 20 and 60 mm, respectively, with negative diluent control. Skin prick tests with both common inhalant aeroallergens and a panel of food allergens were negative.

The recommendation to continue condom use was unacceptable to the couple, and they decided to try desensitization. Intravaginal rush desensitization, as reported by Matloff (1) with minor modification, was performed. Intact fresh semen, supplied by the husband,

was used. Dilutions were made with sterile human serum albumin with phenol diluent. The patient was hospitalized for monitoring, and an intravenous line was placed. With a syringe, 2 ml each of progressively greater concentrations of semen dilutions (1:10 000, 1:1000, 1:100, 1:10, undiluted specimen) were deposited intravaginally at 20-min intervals. Finally, the patient and her husband had unprotected intercourse with no allergic symptoms. Desensitization was maintained by at least twice a week of unprotected sexual intercourse. The patient had no symptoms during the 4 months of follow-up, while the semen skin test was still positive.

Seminal fluid allergy (SFA) in women has been increasingly recognized and documented (2). These reactions range from local swelling to generalized systemic reactions. Condom usage can prevent symptoms of SFA. This measure, however, is often unacceptable to the partners, who look for other treatments. Immunotherapy with whole seminal fluid or with a fraction of seminal fluid with various protocols and with variable success has been reported (2, 3). Recently, intravaginal rush desensitization was offered as a simple therapeutic alternative for selected patients. The first report described a patient with local hypersensitivity (1), while De Cuyper et al. (4) used this technique successfully to treat a woman with systemic SFA (manifested as hand and face urticaria). This patient, an atopic woman, had developed the first symptoms immediately after marriage.

Herein we have reported another successful intravaginal desensitization in a nonatopic patient with systemic SFA who had developed her symptoms only after 7 years of sexual relationship with the same partner.

The mechanism that makes local mucosal allergen hyposensitization a feasible treatment for systemic symptoms is not known. However, the allergen that causes the

symptoms of systemic SFA is clearly absorbed from the same mucosal surface; therefore, the process may work in the same way that oral drug desensitization works. Intravaginal desensitization is simple and more natural for the patients than subcutaneous injections; hence, we suggest that it should be the first therapeutic choice in all patients with SFA when desensitization is indicated.

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Urticaria treated with dapson

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Key words: chronic urticaria; chronic idiopathic urticaria; dapson.

Abbreviations. CIU: chronic idiopathic urticaria; CU: chronic urticaria; DDS: 4,4'-diaminodiphenylsulfone; EBV: Epstein-Barr virus; LTB₄: leukotriene B₄.

● TREATMENT of chronic idiopathic urticaria (CIU) may be a challenge if the disorder does not respond to H₁- and H₂-blockers or even to glucocorticosteroids. Here we present for the first time evidence that low-dose 4,4'-diaminodiphenylsulfone (DDS, dapsone) may improve otherwise

therapy-refractory CIU. A 37-year-old woman presented in March 1996 with a 5-year history of chronic recurrent urticaria and angioedematous swelling of her lips

and upper eyelids. She had a negative personal and a positive familial history of atopy. Initially, urticaria started together with urinary tract infection and treatment with ofloxacin. The patient reported that several immediate-type reactions had been detected in the past (e.g., to cat, house-dust mites, mold fungus, and various foods). Despite consequent avoidance of these allergens, her urticaria persisted unchanged.

Prick testing at our department revealed only one positive reaction (cat) without relevance. Intradermal injection of autologous serum produced no wheal-and-flare reaction. Total IgE was elevated (813 kU/l), but the patient lacked allergen-specific IgE.

Histologic examination of a biopsy (lower lip) showed enlarged epithelia with spongiosis. Edema, enlargement of capillaries, and scattered inflammatory cells were visible within the corium. There was no hint of urticarial vasculitis. In addition, we detected *Helicobacter pylori* infection, intestinal candidosis, and acute EBV infection. After successful treatment of all these infectious diseases, the CIU remained unchanged.

Evidence of both symptomatic and curative effects of low-dose 4,4'-diaminodiphenylsulfone in a case of therapy-refractory chronic idiopathic urticaria (CIU).

Treatment with antihistaminics in disease-adjusted doses (terfenadine 60–240 mg/day; loratadine 10–50 mg/day; cromoglicic acid 800–1200 mg/day; cetirizine 10–30 mg/day) in the past had only minimal efficacy. Even 80 mg prednisone/day plus loratadine was not satisfactory. Therefore, in February 1997, we started treatment with DDS. After the first week, the concomitant cetirizine could be withdrawn. Initially, she received 50 mg DDS/day. The dose of DDS was slowly reduced. During the last month, 25 mg DDS/week was enough to control the CIU. In December 1997, DDS was stopped. Side-effects did not occur. No relapse occurred until December 1998.

Patients with CIU or CU who cannot avoid the triggering agent need long-term treatment based mainly on the application of antihistaminics, sometimes in combination with H₂-blockers. When these agents are not efficacious, alternatives such as cyclosporin A, methotrexate, plasmapheresis, antimalarials, glucocorticosteroids (1, 2), or intravenous immunoglobulin, especially for autoimmune chronic urticaria (3), have been proposed. Although DDS is a well-known therapeutic alternative, it is seldom used for CU/CIU. Here we present for the first time evidence that the low-dose DDS regimen may be adequate to treat CU/CIU. Because DDS-induced side-effects (e.g., methemoglobinemia) are in most cases dose-dependent, the risk under this regimen is extremely low. Dapsone has both antimicrobial and anti-inflammatory effects. Inhibition of neutrophil granulocytes is one major pharmacologic mechanism of DDS. Because urticaria vasculitis and neutrophil urticaria could be excluded in the presented case, the mechanism responsible for clearing CIU is still unknown. One may speculate that downregulation of leukotriene B₄ (LTB₄) (4) and/or interference with CD11b (5), which has been shown to play a role in CU (6), might be relevant.

In summary, on the basis of this encouraging report, DDS seems to be of

interest for the treatment of CIU/CU. Further *in vitro* and *in vivo* investigations in larger patient groups are needed to clarify the pharmacologic activities of DDS in this particular disease.

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Anaphylaxis to trimethoprim

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Key words: anaphylaxis; drug hypersensitivity; skin prick tests; trimethoprim.

● TRIMETHOPRIM is a diaminopyrimidine antibacterial agent used to treat infections due to sensitive organisms, particularly infections of the urinary and respiratory tracts. A trimethoprim-sulfamethoxazole combination (co-trimoxazole) is used widely, and adverse reactions to co-trimoxazole are often ascribed to the sulfamethoxazole component. Side-effects include pruritus, skin rash, fever, nausea, vomiting, and sore mouth. Other effects on the skin have been reported, such as erythema multiforme and fixed drug eruptions.

We report a systemic reaction to trimethoprim in a patient taking a