

frequently and probably more safe.^[4]

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Diagnosis of delayed pressure urticaria

Sir,

Delayed pressure urticaria (DPU) is a physical urticaria in which pressure is the physical stimulus that causes whealing. Pressure (defined as the force applied to a unit area of surface) induces reproducible whealing in DPU. Delayed cutaneous erythema and edema occur in association with marked subcutaneous swelling after the application of a sustained pressure stimulus to the skin. These signs occur as early as 30 min and typically 4 to 6 h later. Lesions may persist for up to 48 h. The response is dependent on the degree of pressure; duration of the stimulus; body site affected; and activity of the disease, which is variable in intensity.^[1] Sites that previously have reacted to pressure have been found to be refractory to an additional pressure stimulus for at least 24 to 48 h. Most patients with DPU have chronic idiopathic urticaria (CIU) and angioedema. DPU should be considered in all patients with CIU whose disease is unresponsive to antihistamines. The disease is

variable and remissions and exacerbations occur.

In DPU, a positive response after any form of pressure challenge consists of the appearance of palpable lesions after at least 30 min. Because most positive responses occur at 6 h, observers usually read pressure tests at 6 h. There is no standard method of pressure testing for DPU. Hence, I used simple and easily available implements like a 2 kg weight and a blood pressure cuff to test for DPU in 50 patients of CIU.

Fifty adult patients with chronic urticaria attending a private skin centre at Navi Mumbai were enrolled in this study. All antihistamines and oral steroids were stopped 48 h prior to the test. A 2 kg of weight, available at a general store, was placed on the right forearm of patients and a blood pressure cuff was strapped tightly around the weight to give sustained pressure [Figure 1]. The pressure in the cuff is raised to 100 mm of Hg and is maintained for 1 min or till patient feels discomfort, whichever is earlier. Reading is taken after 30 min and at 6 h for visible and palpable swelling.

The 50 cases comprised of 33 male and 17 female patients (age range 18-80 years, mean age 43 years). Three patients (2 male and 1 female), out of the 50, tested positive with this instrument at 30 min and at 6 h. Positive test was seen as a palpable and visible swelling on right forearm at the site of pressure at the end of 30 min and at 6 h. These patients had typical history of swelling at the site of pressure, like waist and palms and soles.

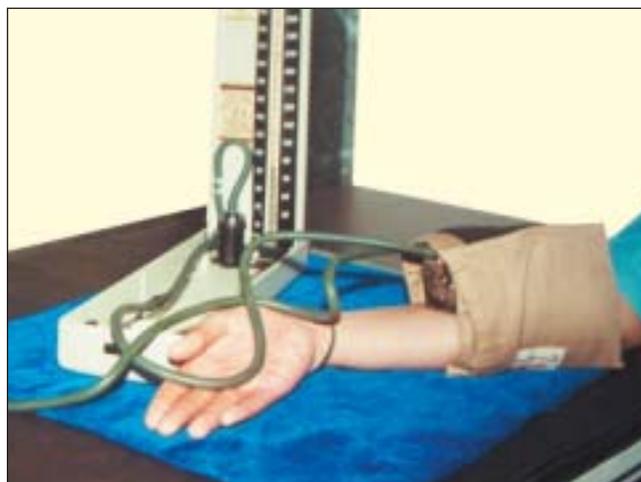


Figure 1: Blood pressure cuff tied with 2 kg weight around right forearm

In this test, we have tried to keep variables constant by using a standard 2 kg weight and a uniform pressure of 100 mm of Hg with the help of sphygmomanometer. Both the items can be easily procured. Patients should not be on antihistaminics or steroids for 48 h to prevent false negative test. In India, dermatographometer is not available.

Ryan *et al.* tested for DPU by hanging a 15 lb weight at the end of a crepe bandage over the shoulder, thigh, or forearms of patients for at least 15 min.^[2] Using this method, the area to which the force is applied is not defined; therefore, its reproducibility is not accurate enough for clinical trials, but the method is useful in clinical settings. Illig and Kunick designed an apparatus in which metal rods are held vertically in place, resting on a patient's back, using a thick plastic sheet of material (Perspex[®]) to keep the rods in place. Adding more weights to the rods raised the pressure applied. The times of application of the pressure varied depending on the severity of the disease.^[3] Modifications of this instrument have been used by other investigators studying DPU. Lawlor used a similar instrument with rods of 1.5 cm diameter and pressures of between 2.29 kg and 4.79 kg that were rested on the back for between 12 and 15 min.^[4] Estes and Yung used a calibrated dermatographometer to reproduce lesions in two patients. They applied pressures of 48, 73, 103, 136, 200 and 234 g/mm² for 10 s to the abdomen, arms and back and inspected the sites for up to 24 h. They showed a threshold whealing response of 136 g/mm² on the abdomen. By applying these pressures to the back for 5, 30, 60, 120 and 180 s respectively, they demonstrated that the time needed to produce a whealing response was inversely proportional to the degree of pressure applied.^[5]

DPU is diagnosed infrequently, probably due to lack of interest in physical urticarias, unfamiliarity with the methods used to study the disease and the fact that chronic urticaria itself is frequently more severe in pressure-prone areas of the body (i.e., under belts or clothing). It is debatable as to whether this condition is mild DPU or is a pressure-induced worsening of chronic urticaria and angioedema.^[1]

Summarizing, DPU is not uncommon in patients with chronic urticaria and this simple test is a valuable aid in a dermatologist's office practice.

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Efficacy of steroid oral mini-pulse therapy in lichen planus: An open trial in 35 patients

Sir,
Lichen planus (LP) is an inflammatory papulosquamous disorder presenting with violaceous, polygonal, flat-topped, pruritic papules and plaques on the flexor surface of the glabrous skin, mucous membrane and nail. Though the exact cause of LP is unknown, the current concept of pathogenesis includes genetic and immunologic factors. Systemic glucocorticoids are the mainstay of dermatologic therapy because of their potent immunosuppressive and anti-inflammatory properties, but their long-term use may lead to various side effects.

To avoid or minimize the side effects of daily steroids, we evaluated the efficacy of oral mini-pulse (OMP) therapy with betamethasone in LP in an open