Bullous Pemphigoid and Diabetes Mellitus

Sir.

Bullous pemphigoid (BP) is an immunobullous disorder mainly affecting subjects over 60, and its association with other diseases is controversial for the already critical high incidence of pathologies such as diabetes, neoplasm, cardiopathies, etc., in this age range.

We have studied the possible association between BP and diabetes mellitus in a retrospective case-controlled study.

Sixty-six patients over 60 years of age (mean age 79, range 62–95, 27 men and 39 women) with BP who attended our Institute between 1985 and 1995 were investigated. The diagnosis in all patients had been confirmed by histological examination and direct and/or indirect immunofluorescence test. Each patient was age- and sex-matched with 2 controls recruited from subjects hospitalized in the same period with a diagnosis of contact dermatitis or urticaria. Controls were the first ones whose names appeared in the hospital record books within 3 months before or after the name of each of the BP patients. Controls receiving steroid therapy were excluded from the study.

Diabetes mellitus was assessed through positive past medical history and/or fasting plasma glucose value > 140 mg/dl conducted before steroid treatment.

As reported in Table I, 21 patients (32%) with BP had an associated diabetes mellitus compared to 12 of the control subjects (9%). This difference was statistically significant (p < 0.001 with Yates' correction).

The prevalence of diabetes in our patients was also relevant when compared to a large population-based survey of known diabetes mellitus in our town of Verona (1), which found 9% diabetes in 48,580 subjects over 60 (9% in men, 8.5% in women).

There are few reports of BP and diabetes mellitus association with different results.

Table I. Subjects with diabetes mellitus (DM) compared as to age and sex

Age	Patients with bullous pemphigoid				Controls			
	Male		Female		Male		Female	
	DM	Tot	DM	Tot	DM	Tot	DM	Tot
60-69	3	6	0	2	0	12	1	4
70-79	4	12	2	17	2	24	2	34
>80	4	9	8	20	3	18	4	40
Total	11	27	10	39	5	54	7	78
	(40.7%)		(25.6%)		(9.2%)		(8.9%)	

Downham & Chapel found an adult-onset diabetes mellitus in 14 of 34 (41%) patients (2).

Chuang et al., in a case-controlled study, found an increased frequency of diabetes in their series of 30 patients with 20% diabetes in BP compared to 2% of controls (3).

On the contrary, Taylor et al. did not find a difference for the frequence of diabetes in a series of 108 patients with BP when compared with controls (4).

Further statistical and clinical studies are then required to evaluate whether this association could share a pathogenetic mechanism.

REFERENCES

 Muggeo M, Verlato G, Bonora E, Bressan F, Girotto S, Corbellini M, et al. The Verona diabetes study: a population-based survey on 498

- known diabetes mellitus prevalence and 5 years all-cause mortality. Diabetologia 1995; 38: 318-325.
- 2. Downham TF, Chapel TA, Bullous pemphigoid. Therapy in patients with and without diabetes mellitus. Arch Dermatol 1978;
- 114: 1639-1642. 3. Chuang TY, Korkij W, Soltani K, Clayman J, Cook J. Increased

frequency of diabetes mellitus in patients with bullous pemphigoid:

a case-control study. J Am Acad Dermatol 1984; 11: 1099-1102.

4. Taylor G, Venning V, Wojnarowska F, Welch K. Bullous pemphigoid and autoimmunity. J Am Acad Dermatol 1993; 29: 181-184.

Accepted March 29, 1996.

Paolo Rosina, Carlo Chieregato and Francesco Saverio D'Onghia Institute of Dermatology and Venereology, University of Verona Piazzale Stefani 1, I-37126 Verona, Italy.