bone have shown that the defective collagen fibrils can be non-mineralized or that the crystals of hydroxyapatite are irregularly arranged.[5] This supports the theories of mineralization of the organic matrix of bone which suggest that normal collagen is required to form a normally mineralized bone. In OI low BMD values are therefore highly likely in spite of having a normal calcium metabolism.

While we are not suggesting that OI should be diagnosed on the basis of bone density results, we certainly feel that in somebody with no obvious precipitating factor for osteoporosis and with spine BMD worse than − 1.5, the possibility of as yet undiagnosed OI should be considered. Serial bone density studies in OI can also be extremely useful in monitoring disease progression as well as assessing the response to any treatment. In our opinion therefore, bone densitometry has an important place in the management of OI.

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Dapsone in Henoch–Schönlein purpura

Sir,

Dapsone appears to be of especial value in cutaneous leukocytoclastic vasculitis.[1] Encouraged by the reported cases of Henoch–Schönlein purpura (HSP) treated with dapsone with good effect,[1–3] I studied the role of dapsone in six patients with HSP (two men and four women, median age 37 years, range 18–54) between December 1991 and October 1993.

All patients presented with the characteristic skin lesions with abdominal pain, fever, arthritis of ankle joints following upper respiratory tract infections and showed on skin biopsy leukocytoclastic vasculitis. One 54 year old woman presented with haematuria and raised blood urea nitrogen and creatinine concentrations while a 32 year old man showed haematuria (Table I). Within 24 hours of starting treatment with dapsone 100 mg/day, four of six patients showed clearance of ankle pain and swelling followed by lower limb purpura by 3–4 days. Haematuria subsided in the two patients within 4 days. Dapsone dose was reduced over the next 2 months (50 mg/day) and then stopped in three patients (nos. 1, 3,4) and in two patients (nos. 5 and 6) over the next 4 months. Patient no. 2 had no recurrence of purpura or rash with just 2 weeks of dapsone 100 mg/day and remains off treatment 9 months later.

Corticosteroids are of limited value in conditions characterized by leukocytoclastic vasculitis.[1] Dapsone, on the other hand, appears to be effective, cheap and safe in relatively small doses.[1] The mechanism of action of dapsone in leukocytoclastic vasculitis is unknown.[1] There is evidence that it has an antioxidant scavenger effect and may also suppress the generation of toxic free radicals in polymorphonuclear neutrophils.[1] In addition, it inhibits prostaglandin PGD_2 production[4] and the synthesis of IgG and IgA antibodies.[5] The latter two properties of dapsone may be of particular importance for its use in HSP in which IgA production is primarily disturbed due to immunodysregulation and disturbances in prostaglandin metabolism contribute to the inflammatory process.[6]

In a condition with no treatment of proven value,[7] there appears to be enough evidence to justify a trial of dapsone in HSP for symptom relief, and for the possible life-threatening complications of gut purpura and severe glomerulonephritis.[1]

Results of this uncontrolled study support those of Hoffbrand,[1] Ledermann and Hoffbrand,[2] and Chamouard and colleagues.[3] They also suggest that the effect of dapsone in HSP should be more widely appreciated and that there is no geographic prejudice for the role of dapsone in the treatment of Henoch–Schönlein purpura.

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Table I Patient characteristics and clinical and laboratory findings for six patients with Henoch–Schönlein purpura treated with dapsone

Variable	*Patients*					
	1	*2*	*3*	*4*	*5*	*6*
Age (years)	18	22	32	47	54	48
Sex	F	F	M	F	F	F
Abdominal pain	+	+	+	+	+	+
Vomiting	–	+	+	–	–	–
Diarrhoea	–	–	+	+	+	–
Arthritis	+	+	+	+	+	+
Haematuria	–	–	+	–	+	–
Raised BUN and creatinine	–	–	–	–	+	–
Disappearance of ankle pain (hours)	24	24	36	24	48	24
Disappearance of purpura (days)	3	3	4	3	4	4
Disappearance of haematuria (days)	–	–	4	–	4	–
Duration of treatment (months)	2	1	2	2	4	4