[1]Sheffield University Department of Ophthalmology and Orthoptics
Sheffield
UK
[2]Departments of Ophthalmology and [3]Medical Microbiology
Royal Hallamshire Hospital
Sheffield
UK

Correspondence to:
Patrick R. S. Richardson
University Department of Ophthalmology and Orthoptics
Royal Hallamshire Hospital
Glossop Road
Sheffield S10 2JT
UK

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Sir,

Long-Term Oral Corticosteroids and Osteoporosis Prevention in an Ophthalmology Clinic

Osteoporosis is a disease characterised by low bone mass with microstructural changes which enhance bone fragility and thereby increase the fracture risk.[1] It is recognised in postmenopausal women as an important cause of morbidity: fractured neck of femur, vertebral crush fractures and chronic back pain. Osteoporosis is now also recognised as an important problem in patients on high-dose corticosteroid therapy.[2,3] The steroid effect on bone mass may occur early during treatment and once established the osteoporosis may be hard to reverse.[4] The Department of Health Advisory Group Report on Osteoporosis[3] states that patients on more than 5 mg of prednisolone daily for more than 3 months are candidates for screening.

Several agents including calcitonin,[5] bisphosphonates,[6] calcium supplements,[7] vitamin D analogues[4] and hormone replacement therapy (HRT)[8] are being used to treat osteoporosis. There is no consensus as to how and when these agents should be used to prevent steroid osteoporosis. An exception to this is calcium supplementation, which should be given routinely to steroid patients.[5,7,9] There is also evidence to suggest that HRT should be given to women put on corticosteroids who are postmenopausal or have had a hysterectomy.[3,7]

In this study we reviewed patients on oral steroids for longer than 4 months who were managed by an ophthalmologist to find the numbers on osteoporosis prophylaxis or who had been given written information regarding increased calcium in their diet.

Methods and Results

Using the pharmacy computer, patients numbers and names given prescriptions of oral steroids from the ophthalmology department in the previous 3 years were identified. Case notes were reviewed for: age; sex; clinical problem; length of time on oral steroids; who was managing the patient; and advice on osteoporosis given, either written in the notes or in a letter to the patient's general practitioner (GP).

Corticosteroids were prescribed for at least 4 months to 112 patients. All patients started with greater than 30 mg prednisolone. These were co-managed in 29 cases. In 83 cases management was purely by the ophthalmology department with the GP. The indications consisted of 52 giant cell arteritis (not all biopsy proven), 7 dysthyroid eye disease, 6 retinal vasculitis, 8 scleritis and 10 others. Fifty-eight patients were female (17 younger than 45 years), mean age 68.2 years range (15–84 years), and 25 were male, mean age 66.4 years (range 18–82 years).

A review of the 83 case notes revealed no evidence of any advice on osteoporosis prevention being given to any of the patients studied and no mention of this requirement to the GP. A review of the eye department pharmacy area (separate from the main pharmacy) failed to reveal any osteoporosis prevention leaflets. The pharmacists when questioned also said that they did not inform patients of this problem.

Discussion

Oral steroids have a large effect on bone metabolism. Corticosteroids inhibit calcium absorption,[10] suppress circulating oestrogen[11] levels in women and

lead to a greater urinary loss of calcium.[12] They also inhibit osteoblast maturation and synthetic capability, reducing the amount of bone formed.[13] The routine use of osteoporosis prophylaxis by calcium supplementation[5,7,9] and HRT for postmenopausal women[8] is now accepted as good practice.[3] This study relates to high-risk patients under the care of an ophthalmologist while on long-term oral steroids for various ophthalmological conditions.

We found that none of those patients managed solely in the eye clinic received any direct instructions on calcium supplements or other forms of osteoporosis prevention. It is suggested that the ophthalmologist is unaware of this potential side effect. We have not investigated whether the GP or community pharmacist may provide this information, although we think it unlikely.

We are aware of a number of prevention studies in the area of steroid-induced osteoporosis, although their role in prevention is not yet known. Osteoporosis has become a more recognised clinical entity with the advent of bone density scans (DXA) and may in the future become important medicolegally.

In our department it is now policy to recommend all patients on corticosteroids to supplement their diet with calcium and vitamin D. This is achieved by a verbal discussion with patients when they are seen and a leaflet given when patients collect their prescriptions from the pharmacy. We also confirm that patients are on HRT if indicated and where appropriate we collaborate in care with a physician.

P. R. Hodgkins[1]
R. G. Hull[2]
A. Vakalis[1]
A. Cole[1]
C. Hallet[1]
A. R. Evans[1]
M. N. Jeffrey[1]

Departments of [1]Ophthalmology and
[2]Rheumatology
Queen Alexandra Hospital
Portsmouth
UK

Correspondence to:
Mr P. Hodgkins
Department of Ophthalmology
Queen Alexandra Hospital
Cosham
Portsmouth PO6 3LY
UK

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Sir,

Transposition of Homonymous Hemianopia after Craniopharyngioma Surgery

Craniopharyngiomas are a cause of significant visual morbidity in both children and adults. Visual deficit results either from progressive tumour expansion and compression of optic nerves, chiasm and tracts or from intra-operative injury to distended optic pathways and the surrounding vasculature.[1] Rapid and full recovery of dense visual field defects after surgical decompression is well documented in association with craniopharyngiomas[1–3] and pleomorphism of visual fields is a characteristic feature during both disease progression and treatment of individual tumours.[4] We present an unusual case, whereby resolution of a right homonymous hemianopia and the development of a left homonymous hemianopia occurred simultaneously, as a result of one operation to debulk a giant craniopharyngioma.

Case Report

A 13-year-old boy presented with a 6 week history of headaches, listlessness, anorexia and weight loss. Just