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Sir,

Bilateral acute uveitis and conjunctivitis after zoledronic acid therapy

We report a case of severe, bilateral fibrinous anterior uveitis with concurrent bilateral conjunctivitis following administration of intravenous zoledronic acid for the treatment of a monoclonal gammopathy of undetermined significance (MGUS).

Case study

A 62-year-old lady, with no ophthalmic history, had been under the care of the haematologists for 6 months for an MGUS with paraprotein levels of 3.3 g/l. and a slightly reduced IgM level (0.39). She began to suffer increasing pain in her back and femur with spontaneous bruising so a skeletal survey was performed, which revealed no localised bony pathology and the decision was made to administer zoledronic acid 4 mg IV. At 48 h after administration, she developed severe blurring of vision associated with pain and swelling of both eyelids—at this point, she was administered chloramphenicol ointment. The situation continued to deteriorate and 5 days after administration of zoledronic acid, she presented to the ophthalmic clinic with a best-corrected visual acuity of 6/60 bilaterally. She had severe chemosis in both eyes, especially of the lower fornix, and bilateral fibrinous uveitis with no hypopyon. Her intraocular pressures were 19 bilaterally and medium sized keratic precipitates were noted on the cornea. There was no evidence of any involvement of the vitreous and there was no abnormality of the retina. On dilation, posterior synechiae were noted, particularly in the left eye—Figure 1, which were broken after a short period of intensive dilation. The chloramphenicol treatment was discontinued and the patient was started on intensive Prednisolone Forte with regular 1% cyclopentolate. Over the following 10 days—with no further zoledronic acid treatment—the situation improved to no anterior chamber activity and the conjunctivitis settled completely. Best-corrected visual acuity is now 6/18 right and 6/12 left.

Comment

MGUS is found in approximately 3% of those older than 70 years. It is a plasma cell proliferative disorder and the diagnosis implies the presence of a monoclonal protein without evidence of multiple myeloma, macroglobulinaemia or amyloidosis. Patients have a 1% per year risk of converting to a malignant monoclonal gammopathy—multiple myeloma.[1]

Zoledronic acid belongs to the bisphosphonate class of drugs, which are used to treat bone diseases characterised by increased osteoclastic bone resorption. Ophthalmologic adverse effects of bisphosphonate therapy are infrequent, with conjunctivitis being a recognised side effect. Severe anterior uveitis has been reported with other members of this drug family—alendronate,[2,3] pamidronate[4]—but never

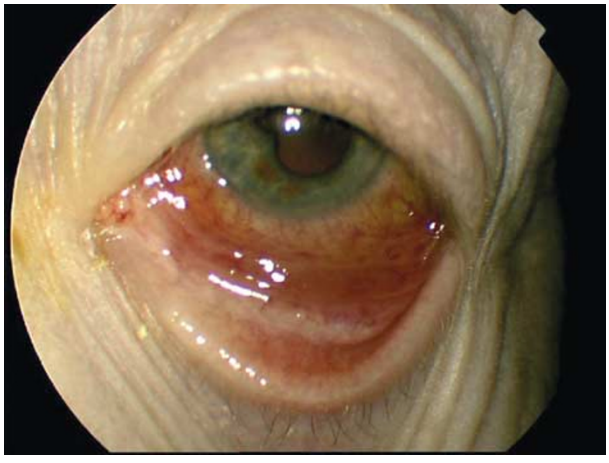

Figure 1 On dilation, posterior synechiae were noted, particularly in the left eye.

zoledronic acid. Our case mirrored these previously reported cases with onset being between 24 and 48 h after infusion initiation, bilateral involvement, and a good response to topical steroid treatment with bisphosphonate discontinuation.

With regard to our patient, the conjunctivitis affected primarily the inferior fornix raising the possibility of an allergic response to the topical antibiotic; however, she does not have a history of atopy and has no previous exposure to chloramphenicol, making such a severe reaction unlikely to be due to the primary exposure to the ointment. There is the possibility that the inflammation may be a consequence of the primary pathology; however, there are no reports in the literature of anterior uveitis being associated with either MGUS or multiple myeloma and with the evidence detailed above regarding other bisphosphonates, we must assume that the uveitis is secondary to the treatment. It would be unethical to rechallenge the patient to see if a recurrence occurred.

Bisphosphonates are being used successfully in an increasingly broad range of disorders and with their increasing use, the ophthalmology and haematology communities should be aware of the potential ocular side effects.

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Sir,

The successful use of infliximab in resistant relapsing polychondritis and associated scleritis

Relapsing polychondritis is an uncommon, chronic, multisystem inflammatory disorder of cartilaginous structures. The specific cause is unknown, but it is believed that an immunologic reaction to type II collagen plays a key role. Type II collagen is present in cartilage and sclera of the eye. Patients with relapsing polychondritis have demonstrated both circulating antibodies and cellular immune reactions to type II collagen.[1,2] Relapsing polychondritis is characterized by an episodic and progressive course affecting predominantly the ear, nose and laryngotracheobronchial tree. It often presents in an enigmatic fashion and is easily misdiagnosed. The disease can be debilitating and even life threatening. Ocular manifestations may appear in approximately 51% of cases,[3] episcleritis and scleritis being the most common. Misdiagnosis of reactive arthritis or spondyloarthropathy is often made when eye and joint symptoms coexist.[4]

Case report

A 45-year-old lady has been attending the outpatient department for the past 20 years. She has a history of recurrent episodes of episcleritis, scleritis, and anterior uveitis which was controlled by topical steroids, mydriatics, and oral nonsteroidal anti-inflammatory drugs. A full systemic evaluation was carried out during the early stage revealed erosive changes of the sacroiliac joint compatible with ankylosing spondylitis in addition to being positive for HLA-B27.

She presented 3 years ago to the accident and emergency department with a painful, red swollen left outer ear and was admitted to the ENT ward. She was treated with intravenous antibiotics for possible infective perichondritis but did not respond. In addition, her right eye was red and painful, and she also complained of experiencing intermittent joint pains with swelling of the left ankle. Of importance in her medical history was a 12-year history of sudden hearing loss in her right ear of unknown cause, and she has also recently been diagnosed with hypertension.