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Sir,
Can breast implants be responsible for dry eye?

While the correlation between a systemic disease and breast implant leakage continues to be debated,^{1,2} we report a case that might confirm breast implants could be responsible for dry eye.

Case series

A 64-year-old female was referred for severe dry eye syndrome in both eyes that had appeared 6 months before. Her past medical history was relevant for breast augmentation with silicone implants 18 years before. She presented with complaints of bilateral fluctuating blurry vision, severe dry eye sensation, and retrobulbar pain. She also reported a recent loss of weight and asthenia. Best corrected visual acuity was 20/20 in both eyes. Ophthalmologic examination revealed severe dry eye syndrome in both eyes with mild superficial punctate keratitis, decreased tear breakup time, and decreased Schirmer test value. There was no sign of intraocular inflammation. Hypertrophy of both lacrimal glands was observed on orbital MRI (Figure 1a).

Considering the hypertrophic lacrimal glands and the deterioration of the patient's general status, a complete check-up was performed. The only abnormality was a lung tomography that showed bilateral alveolo-interstitial opacities (Figure 1c). She underwent bronchoalveolar lavage and a transparietal lung biopsy. The final diagnosis was organized pneumonia secondary to silicone breast implant leakage. Oral steroids (1 mg/kg/day) were given and the implants were removed. Their macroscopic evaluation did not reveal any abnormality. However, as a sign of silent breast implant leakage, a few months later, cutaneous

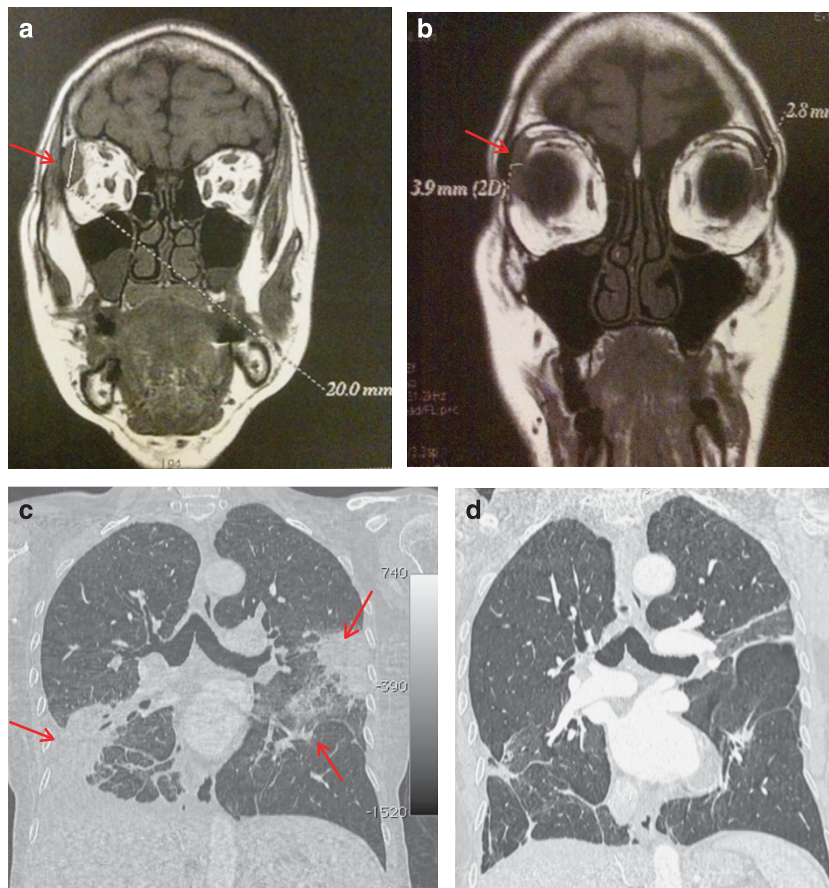


Figure 1 MRI showing the lacrimal gland before (a) and after (b) breast implant removal. A substantial decrease in size was observed. The lung scan shows a triangular, pleura-based opacity, and ground-glass opacities before implant removal (c) and a few months later (d). The opacities have almost completely disappeared.

siliconomas were observed in the residual breast cavity clinically and with breast MRI.

Vast improvement in the clinical asthenia symptoms and in the clinical and radiologic signs of pneumonia was observed after corticosteroid treatment and breast implant removal (Figure 1d). Moreover, the dry eye syndrome completely resolved with absence of symptoms, normal dry eye tests, and a normal lacrimal gland size on MRI (Figure 1b).

In the present study, the association of organized pneumonia, dry eye syndrome, and lacrimal gland hypertrophy suggested a connectivitis.¹ Although the correlation between a systemic disease and breast implant leakage continues to be debated,^{1,2} the improvement of systemic and ocular signs after implants removal might confirm their responsibility in the present case. Steroids may have played a role in the improvement of patient symptoms. Nevertheless, this treatment was stop after implant removal and no recurrence of systemic or ocular manifestations was observed during the follow-up. Moreover, even if oral steroids improved organized pneumonia, they have never been able to treat any dry eye syndrome.^{3,4} Indeed, breast implant removal was the probable cause of the radical improvement of ocular signs.

Comment

The pathophysiology of dry eye syndrome is complex and may require further explorations when atypical.⁵ Considering this observation, the patient should be asked whether breast implant surgery has been performed in the assessment of dry eye diseases. In this particular case, implant rupture or leakage should be ruled out.

Conflict of interest

The authors declare no conflict of interest.

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Sir, Photocoagulation guided by wide-field fundus autofluorescence in eyes with asteroid hyalosis

Asteroid hyalosis is a benign vitreous disease with a minimal impact on visual function. Its prevalence among normal individuals is ~1%¹ and may be higher among diabetic patients. Occasionally, clinicians feel stress while observing the eyes with severe asteroid hyalosis because asteroid bodies are brightly shining on the microscopic light. A previous report referred that asteroid hyalosis was the cause of 8.5% of ungradable colour photographs in the cohort.²

Case report

An 80-year-old man was followed up after the treatment of glaucoma at Kyoto University Hospital. He had type 2 diabetes and presented for yearly fundus examinations. On the basis of these findings, the patient was diagnosed with moderate non-proliferative diabetic retinopathy, although the presence of bilateral severe asteroid hyalosis prevented detailed observation (Figure 1a). In 2012, the right eye had exhibited signs of a small pre-retinal haemorrhage. Fluorescein angiography was performed, and it revealed bilateral neovascularisation (Figure 1b). The patient was treated with pan-retinal photocoagulation (PRP), however, the resulting laser scars could not be assessed effectively by slit-lamp biomicroscopy owing to the obstructing presence of the asteroid hyalosis. The laser scar did appear as an area of hyperfluorescence when imaged using wide-field fundus autofluorescence (FAF) (Figure 1c). The evidence provided by these FAF images allowed us to perform additional photocoagulation as necessary (Figure 1d).

Comment

The results of examinations at our institution have shown that fluorescein angiography (FA) and optical coherence tomography (OCT) images are better suited compared with colour photography or indirect microscopy for imaging eyes with asteroid hyalosis. FA and OCT imaging utilise specific wavelengths of light and are less affected by asteroid hyalosis than are conventional