Sir,

A 59-year Caucasian male with a long history of chronic rhinosinusitis underwent bilateral Functional Endoscopic Sinus Surgery (FESS) along with septoplasty. Preoperative Computed Tomogram (CT) scan of his paranasal sinuses showed mucoperiosteal disease but no other bony defects. Intraoperatively, he was noted to have a dehiscent left lamina papyracea before the FESS was started. We routinely monitored the eye during FESS by intermittent ballottement of the eye ball and endoscopically, looking for bulging movement of the medial wall of the orbit. However, complete sphenoethmoidectomy was performed bilaterally and biodegradable dressing was placed in the middle meatus as a spacer. The postoperative recovery was uneventful and the patient was discharged home the same day with an advice to avoid lifting, straining and nose blowing for the next few days.

The following day, the patient noticed a swelling under his left eye soon after he performed saline douching. Apart from swelling, no other complaints were reported. The patient reattended our unit where left lower eyelid surgical emphysema was noticed which had a characteristic crepitus on palpation but no tenderness (Figure 1A). There was no proptosis, red eye, visual impairment; and the patient had a full range of movement in both eyes without any pain. The nasal endoscopy revealed appearances in keeping with the recent sinonasal surgery. There were no signs of systemic upset. The patient was observed in the unit for three hours and as the emphysema remained localized and did not progress, he was allowed to go home with an advice to avoid saline douching in his left nose for the next few days. The swelling settled down within 48 hours (Figure 1B) and the patient reported no adverse sequelae.

FESS is an established surgical intervention for chronic rhinosinusitis. Periorbital emphysema is a reported complication associated with FESS.\textsuperscript{1,2} Depending upon the severity of the periorbital emphysema, the consequences can be disastrous including blindness.\textsuperscript{3} Mostly, this complication is associated with a strenuous activity like nose blowing or sneezing in the immediate postoperative period after FESS in patients with damaged lamina papyracea.\textsuperscript{4} However, in our case, the patient avoided all strenuous activities but developed periorbital emphysema after using saline douche via a 10 milliliter syringe. It would appear that the pressure of the saline jet must have hit the dehiscent lamina papyracea and allowed the entrance of the air into the eye. It was fortunate that the trapped air remained localized under the lower lid and gradually resolved on its own.

This case highlights the importance of intraoperative monitoring of the eye to establish a dehiscent lamina papyracea. Perhaps the most important lesson is to avoid saline douching for first few days after FESS, if damage to the medial wall of the orbit or dehiscent lamina is suspected.

REFERENCES


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