Prognosis of upper airway remodelling in chronic rhinosinusitis

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Introduction
Remodelling changes of the upper airway are relevant to the clinical characteristics associated with chronic rhinosinusitis (CRS). However, the impact of upper airway remodelling on prognosis is unclear. This study investigates the clinical outcomes between patients with and without remodelling features associated with CRS.

Methods
Population
Case (target) population
The presence and extent of remodelling changes were assessed relative to clinical outcomes and further management. Histopathological analysis included eosinophil count, eosinophil activation and remodelling changes. Mucosal damage was defined as ulceration, oedema and hypertrophic changes.2
Control population
As above but the biopsies at the time of surgery did not demonstrate the remodelling changes.

Intervention
ESS and postoperative care including topical and oral corticosteroids.

Outcome measure
Patient reported outcomes (PROMs) were assessed using a Nasal Symptom Score (NSS) and Sino-Nasal Outcome Test (SNOT-22). These were assessed at a preoperative baseline and 12 months postoperatively.

Treatment measures
Oral steroid usage and topical steroid irrigation frequency were assessed.

Statistical analysis
Chi square analysis for groups, Kendall’s tau-b for the ordinal scores from topical steroid use.