

Revision surgery, biologics, or both?

The EPOS/EuFOREA criteria for the indication of biologics propose to always do one (full house) FESS before considering biologics⁽¹⁾. It is, however, unclear at the moment, what the extent of the performed surgery should have been and whether there is any benefit from repeating the surgery, doing more extensive surgery or doing revision surgery before starting biologics to start with a clean slate. Reports on the recurrence rate of patients with CRSwNP differ widely⁽²⁾. Important components explaining these differences are the outcome measure of recurrence, the comorbidities of the patient, the number of earlier surgeries and the setting in which recurrence is evaluated^(2,3). Factors associated with increased revision rates included allergic fungal rhinosinusitis, aspirin-exacerbated respiratory disease, asthma, prior polypectomy, tissue eosinophil level and time since last surgery^(2,4). Although some surgeons believe otherwise, there is, to my knowledge, no evidence from randomized controlled trials showing long term superiority of more extensive surgery⁽⁵⁾. When, in shared decision, we try to inform our patients to decide on the best management option, there are huge challenges when comparing the different available treatment options⁽⁶⁾. We often lack data from randomized trials and we are hampered by our beliefs⁽⁷⁾.

The first question: is there any benefit on doing (more extensive) surgery before starting with a biological can be divided into two questions. The first is whether a biologic might not be needed when more extensive surgery is done (for which as argued above there is not much evidence), the second is whether the biologics might work (better) after more extensive surgery. Although some small retrospective studies address these questions, also here, no prospective (randomized) trials are avail-

able. One could argue that the excellent results achieved with some biologics^(8,9) and Kiricsi et al. (this issue) limits the possibilities for further improvement when we consider the second question at least for Dupilumab. However, we do not know whether optimal surgery or surgery at the start of treatment with a biologic will improve the chance of achieving remission, at potentially a lower dose of biologic or even cure (Fokkens, June 2024 issue). We also cannot answer the question whether in patients with increased chance of recurrence, it might be beneficial in the long run to start with a biologic directly after the last surgery instead of waiting for the polyps to recur. Biologic therapies offer hope to patients with diseases recalcitrant to conventional therapies but are often significantly more expensive. We urgently need answers to the questions above to reserve biologics for the patients needing them most and to convince payers that we use resources wisely⁽⁷⁾. In this issue of the Journal again a few relevant pieces of the puzzle have been slotted. Otten et al. shows the response to systemic corticosteroids to be a good predictor for smell recovery with dupilumab (this issue). Hernaiz-Leonardo et al. propose a new (Sines) score with better properties than the often-used modified Lund-Kennedy score (this issue). Our studies would benefit from a reliable animal model to study CRSwNP. Unfortunately, Sánchez-Montalvo et al. show in this issue that the most used OVA+SEB mouse model is very suitable to study severe allergies but probably less to study CRSwNP. We live in exciting times where evidence how to best manage our patients appears in dazzling space. Rhinology Journal tries to give the reader guidance by discussing the most prominent questions and the studies that try to answer them.

References

1. Fokkens WJ, et al. EPOS/EuFOREA update on indication and evaluation of Biologics in Chronic Rhinosinusitis with Nasal Polyps 2023. *Rhinology*. 2023 Jun 1;61(3):194-202.
2. Loftus CA, et al. Revision surgery rates in chronic rhinosinusitis with nasal polyps: meta-analysis of risk factors. *Int Forum Allergy Rhinol*. 2020 Feb;10(2):199-207.
3. Arancibia C, et al. Twelve-year long-term post-operative outcomes in patients with chronic rhinosinusitis with nasal polyps. *Rhinology*. 2022 Aug 1;60(4):261-269.
4. Kim DH, et al. Clinical predictors of polyps recurring in patients with chronic rhinosinusitis and nasal polyps: a systematic review and meta-analysis. *Rhinology*. 2023 Dec 1;61(6):482-497.
5. Zhang L, et al. Long-term outcomes of different endoscopic sinus surgery in recurrent chronic rhinosinusitis with nasal polyps and asthma. *Rhinology*. 2020 Apr 1;58(2):126-135.
6. Hellings PW, et al. EUFOREA/EPOS2020 statement on the clinical considerations for chronic rhinosinusitis with nasal polyps care. *Allergy*. 2024 May;79(5):1123-1133.
7. Hopkins C. Ethical dilemmas associated with the introduction of biologic treatments in chronic rhinosinusitis with nasal polyps. *Rhinology*. 2022 Jun 1;60(3):162-168.
8. De Corso E, et al. Dupilumab in the treatment of severe uncontrolled chronic rhinosinusitis with nasal polyps (CRSwNP): A multicentric observational Phase IV real-life study (DUIPIREAL). *Allergy*. 2023 Oct;78(10):2669-2683.
9. van der Lans RJL, et al. Two-year results of tapered dupilumab for CRSwNP demonstrates enduring efficacy established in the first 6 months. *Allergy*. 2023 Oct;78(10):2684-2697.



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