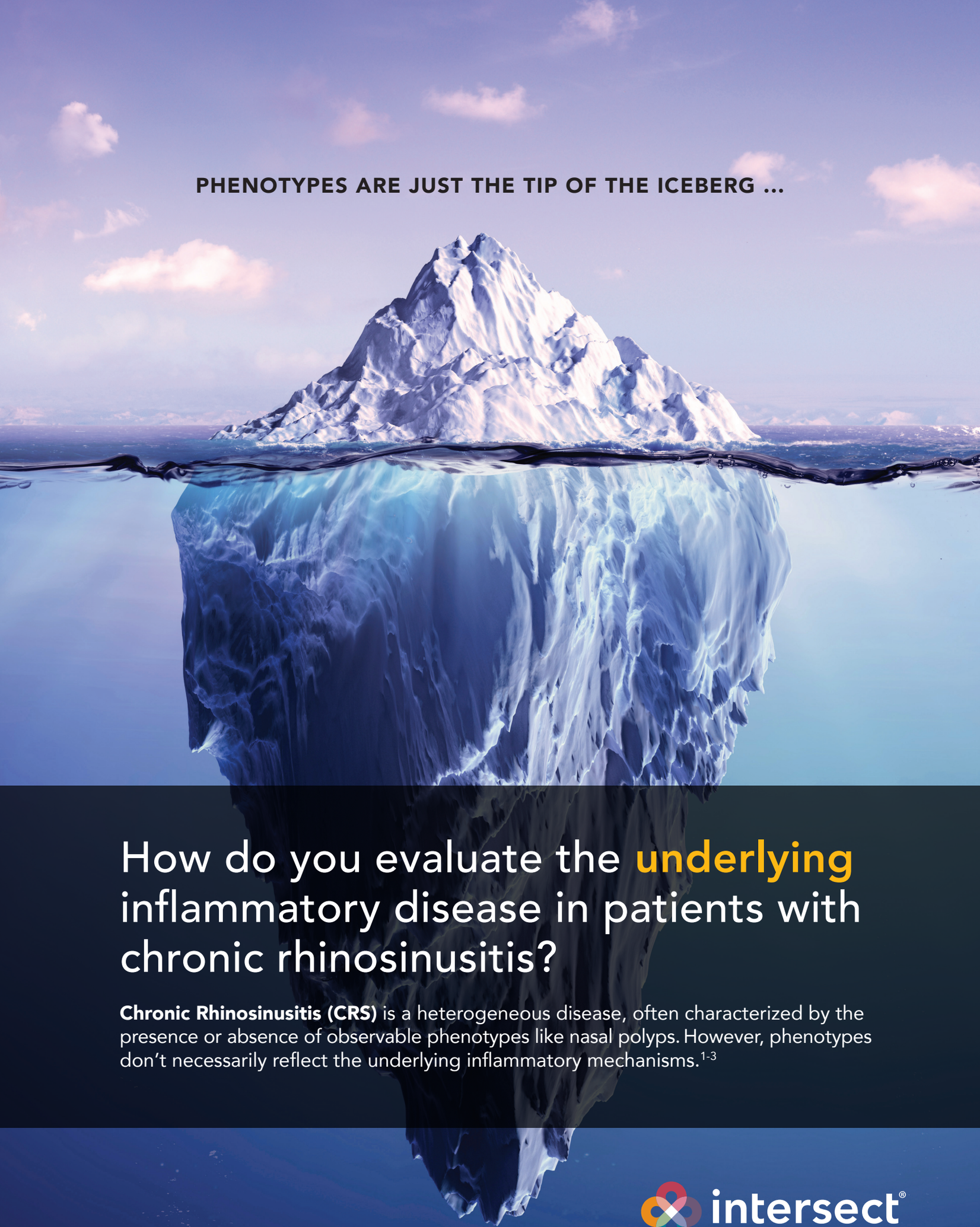

How do you evaluate the underlying inflammatory disease in patients with chronic rhinosinusitis?

Chronic Rhinosinusitis (CRS) is a heterogeneous disease, often characterized by the presence or absence of observable phenotypes like nasal polyps. However, phenotypes don't necessarily reflect the underlying inflammatory mechanisms.[1-3]

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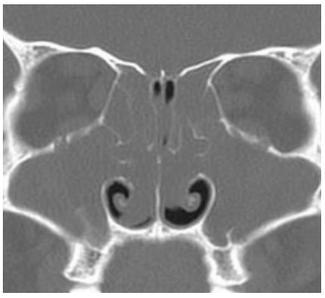
ABOVE THE SURFACE IN CRS

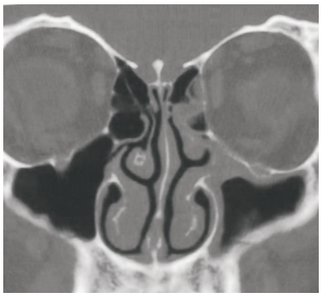
Above the surface, CRS is often phenotypically characterized by the presence (CRSwNP) or absence (CRSsNP) of nasal polyps.[1,2]

CRSwNP



- Gradual progression of symptoms
- Typical symptoms[3]:
  - Olfactory loss
  - Presence of allergic mucin
  - History of recurrent FESS
- Diffuse mucosal inflammation[4]

CRSsNP



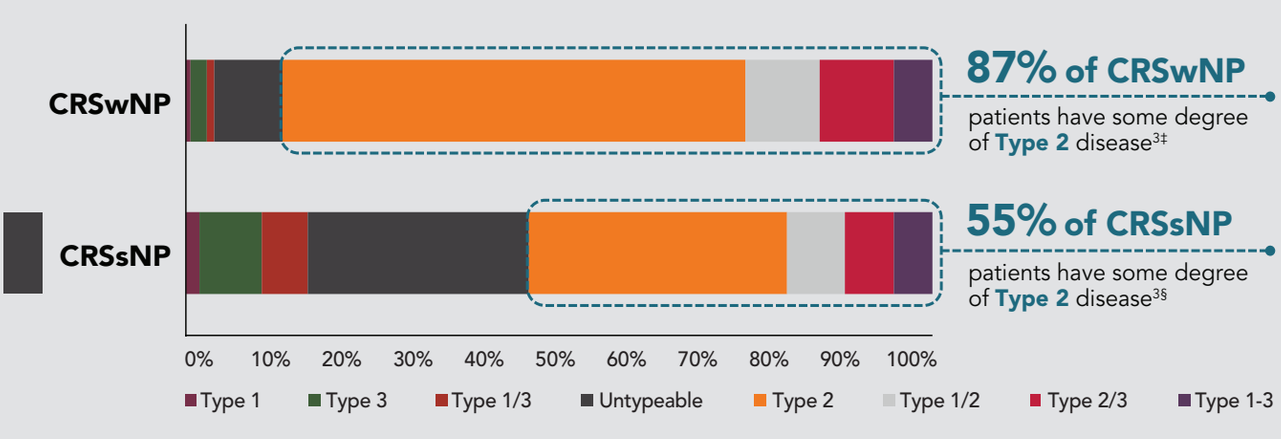
- Repetitive events
- Typical symptoms[3]:
  - Rhinorrhea
  - Sinus pressure/pain
  - Headache/migraine
  - Fatigue/fever
- OMC obstruction[5]

BELOW THE SURFACE, TYPE 2 INFLAMMATION PREDOMINATES IN CRS

CRS is an inflammatory disease, in which the underlying inflammation is largely characterized as either Type 1, 2, or 3.[2,3,6]

PREVIOUSLY, CRSwNP was largely associated with Type 2 and CRSsNP with Type 1 inflammation[7-10]

NOW, evidence suggests that Type 2 inflammation is the leading inflammatory mechanism underlying CRS, **regardless of the presence of nasal polyps[3]*†**



KEY TAKEAWAY: Nasal polyp status alone cannot be used to assess the underlying inflammatory state.[3] Targeted therapy may not adequately address the heterogeneous and complex nature of the underlying inflammation in CRS.[11]

FESS, functional endoscopic sinus surgery; IFN, interferon; IL, interleukin; OMC, osteomeatal complex.

*Type 2 inflammation only or a mixture of Type 2 with Type 1 and/or Type 3.

†Study evaluated the association between inflammatory endotypes and clinical presentations in CRS. Patients with CRSsNP (n=121) were compared with patients with CRSwNP (n=134) and markers including IFN-γ (Type 1), eosinophil cationic protein (Type 2), Charcot-Leyden crystal galectin (Type 2), and IL-17A (Type 3) were used to determine inflammatory endotypes.

‡As compared to 17% and 18% of CRSwNP patients have some degree of Type 1 and Type 3 inflammation, respectively.

§As compared to 21% and 27% of CRSsNP patients have some degree of Type 1 and Type 3 inflammation, respectively.

STEROIDS LIMIT TYPE 2 INFLAMMATION

Surgery can help remove inflamed mucosal tissue; however, it does not address the root cause of the disease, and revision surgery is often needed.[12] Alleviating persistent inflammation with intranasal steroids (INS) postoperatively is critical for achieving optimal surgical outcomes.[13]

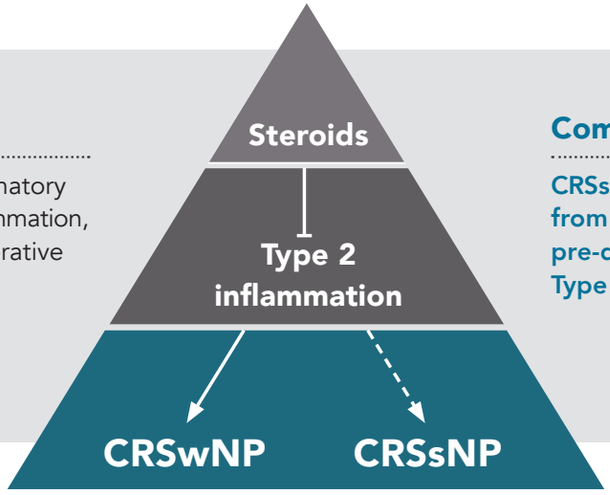
40%
of CRSwNP patients have recurrence of nasal polyps within 18 months post surgery[12]

16%
of CRSsNP patients **require revision surgery** in a 5-year follow-up[14]

6X
Disease recurrence post surgery in patients without INS steroids vs with INS steroids, at 1 year[15]

Traditional Approach

Steroids have potent anti-inflammatory activity that mitigates Type 2 inflammation, making them a standard postoperative treatment in CRSwNP[7,16]



Comprehensive Approach

CRSsNP patients may also benefit from steroids based on the pre-dominance of underlying Type 2 inflammation[3,16]

CONSIDER THE IMPACT OF ORAL STEROIDS

Although oral corticosteroids (OCS) have an established role in postoperative care, and in many cases may be the right treatment for patients with CRS, it's important to consider its challenges.[1,17] Even short courses of OCS have been associated with systemic adverse reactions, especially when administered repeatedly.[18]

Not all steroids are created equal

Mometasone furoate (MF) is a next-generation corticosteroid designed for improved efficacy and safety.[19] MF delivers:

High lipophilicity
Readily absorbs into tissue[19]

Targeted potency
High glucocorticoid receptor affinity[19]

Nominal systemic bioavailability
Minimizes systemic effects[19]

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PROPEL implants feature an innovative 2-in-1 mechanism that opens the sinuses while delivering MF[20-22*]

PROPEL is an MF-eluting implant proven to reduce the need for postoperative interventions in CRS patients regardless of nasal polyps[23]

PROVEN SUCCESS: PROPEL is the only sinus surgery implant clinically proven and supported by Level 1-A evidence to significantly improve outcomes of ethmoid sinus surgery.[23]

In randomized clinical trials, PROPEL delivered significant reductions in the need for postoperative interventions, **REGARDLESS OF NASAL POLYPS**, compared to a non-drug implant at Day 30 following ethmoid sinus surgery.[23†‡]

All patients	CRSwNP patients	CRSsNP patients
35% relative reduction	**36%** relative reduction	**35%** relative reduction
(32.8% vs 50.8%; *P*=0.0008; N=143)[23]	(32.5% vs 50.6%; *P*=0.0071; n=91)[23]	(33.3% vs 51.1%; *P*=0.0455; n=52)[23]

KEY TAKEAWAY: Since 2011, PROPEL has delivered the power of robust, clinically proven benefits to improve sinus surgery outcomes, **REGARDLESS OF NASAL POLYPS**.

*The precise mechanism behind the anti-inflammatory properties of the eluted MF is not known.[20]

†Postoperative interventions was a composite endpoint that included surgical intervention required to separate an adhesion and/or oral steroid intervention to resolve recurrent ethmoid sinus inflammation, edema, and/or polyp recurrence.[23]

‡Judged by an independent panel.[23]

Study design: Meta-analysis of two prospective, randomized, double-blinded multicenter studies (Pilot and ADVANCE II) that enrolled 143 patients.[23]

The PROPEL sinus implants are indicated to maintain patency and locally deliver steroid to the sinus mucosa in patients ≥18 years of age after sinus surgery: PROPEL for the ethmoid sinus, PROPEL Mini for the ethmoid sinus/frontal sinus opening, and PROPEL Contour for the frontal/maxillary sinus ostia. Contraindications include patients with intolerance to mometasone furoate (MF) or hypersensitivity to bioabsorbable polymers. Safety and effectiveness of the implant in pregnant or nursing females have not been studied. Risks may include, but are not limited to, pain/pressure, displacement of the implant, possible side effects of intranasal MF, sinusitis, epistaxis, and infection. For full prescribing information see IFU at www.IntersectENT.com/technologies/. Rx only.

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MOMETASONE FUROATE SINUS IMPLANTS