



Orofacial Granulomatosis & Oral Crohn's Disease

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The slides have been reviewed for off label information by Ferring Pharmaceuticals





Disclosures

- Paid honoraria and expenses for this presentation by Ferring Pharmaceuticals
- Holds research grants from Biogen, Takeda, AbbVie, Tillotts Pharma, Pfizer
- Served on the advisory boards of Takeda, AbbVie, Merck, Pharmacocosmos, Warner Chilcott, Janssen, Falk Pharma, Biohit, TriGenix, Celgene and Tillots Pharma
- Received speaker fees from AbbVie, Biogen, AbbVie, Janssen, Merck, Warner Chilcott, Celltrione, Falk Pharma.

My disclosure ...

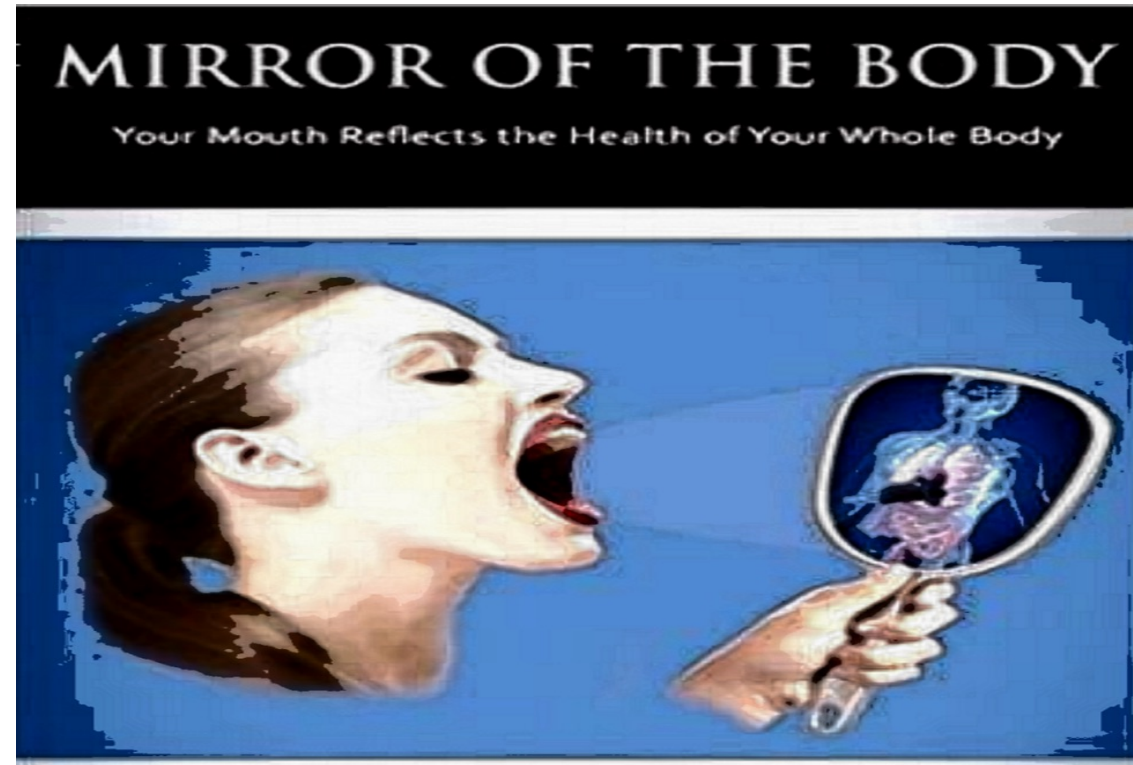


I am not a dentist or oral physician !



All starts in the mouth...





“Your mouth is a mirror of your body”

“Failure to examine the mouth is a glaring sin of omission”

Oral lesions in CD



- Overall prevalence
 - 5-50%
- Primary presenting sign in CD
 - 5%-10%

Rowland M, et al *Inflamm Bowel Dis.* 2010; 16(2):332-7

Alawi F *Dent Clin North Am.* 2005 Jan; 49(1):203-21



Oral lesions in CD

- Children >> Adults
- More in those with
 - Upper GI disease
 - Perianal disease
- May be more severe at time of active disease

Approach to oral lesions in CD



Highly specific	Highly suspicious	Non specific
Orofacial CD	Tag like lesions	Malabsorption
Granulomatous cheilitis	Cobblestoning	Infections
Pyostomatitis Vegetans	Lip swelling with vertical fissuring	Drug related others
	Deep lineal buccal sulcal ulcers	

Approach to oral lesions in CD



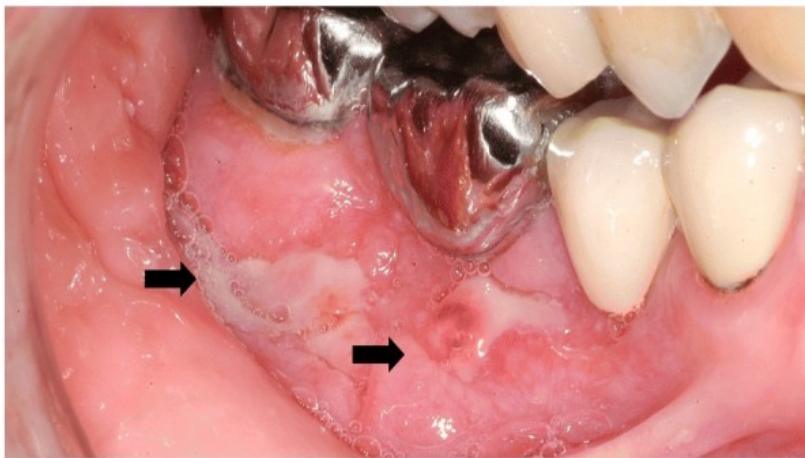
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Oral Crohn's



Oral Crohn's

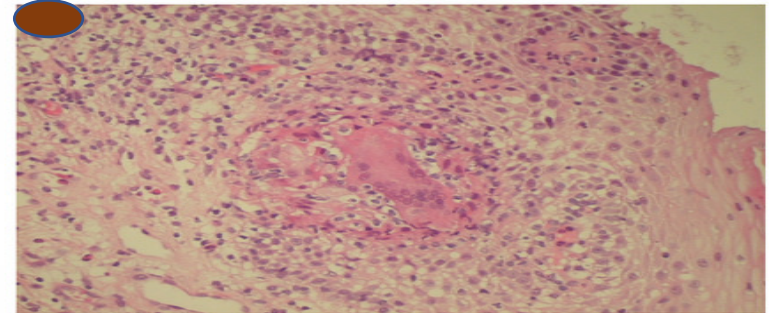
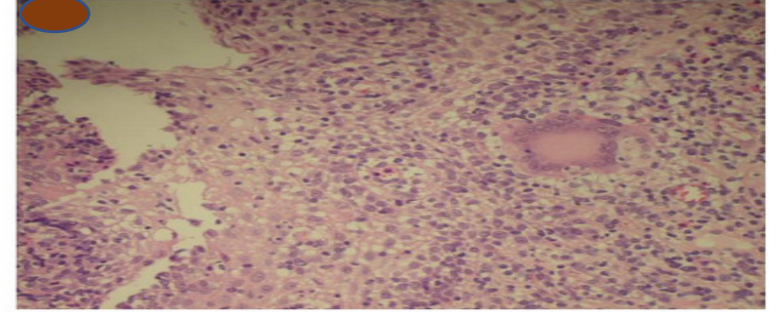
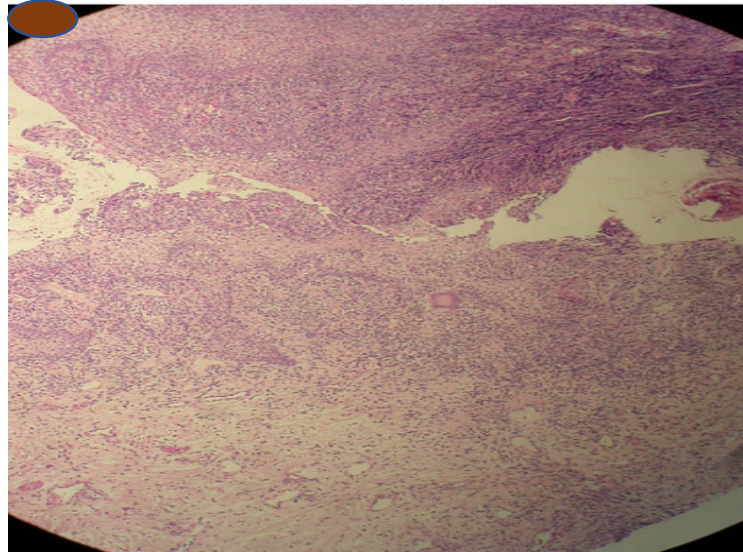
Chronic Phase : Lesions in mouth mimic intestinal lesions



Oral Crohn's



Mimic intestinal lesions histologically



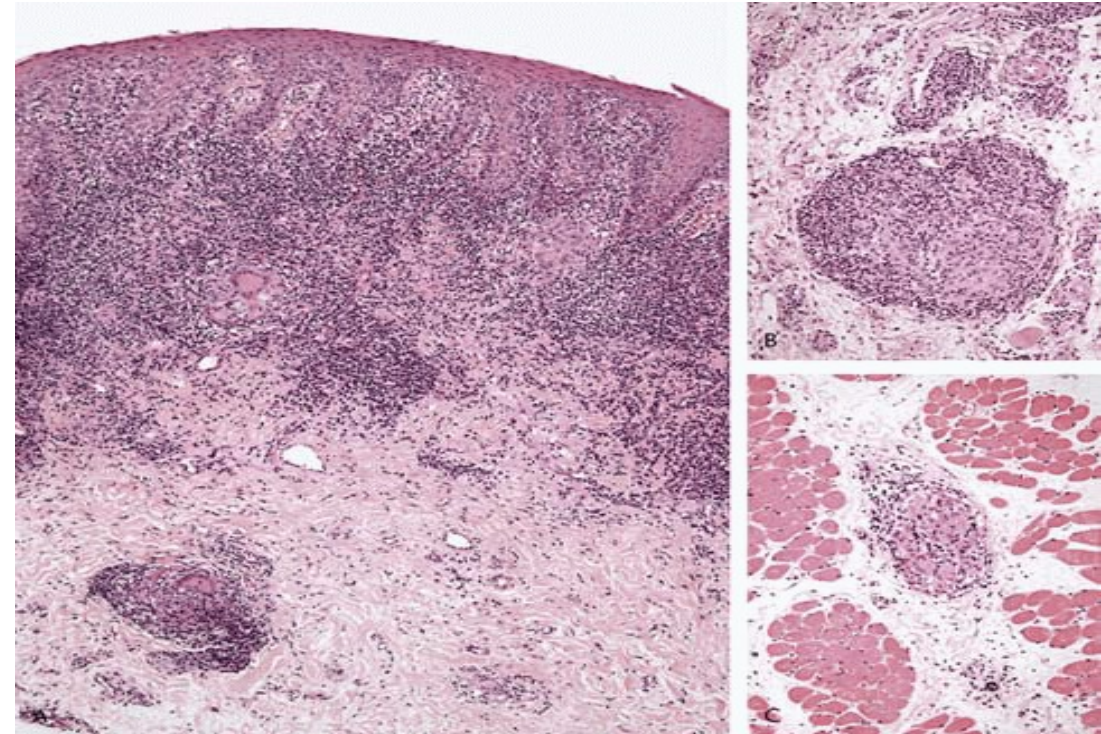
Granulomatous Cheilitis



- Subacute manifestation of CD
- Swelling limited to the lip
- Recurrent episodes lead to permanent oedema

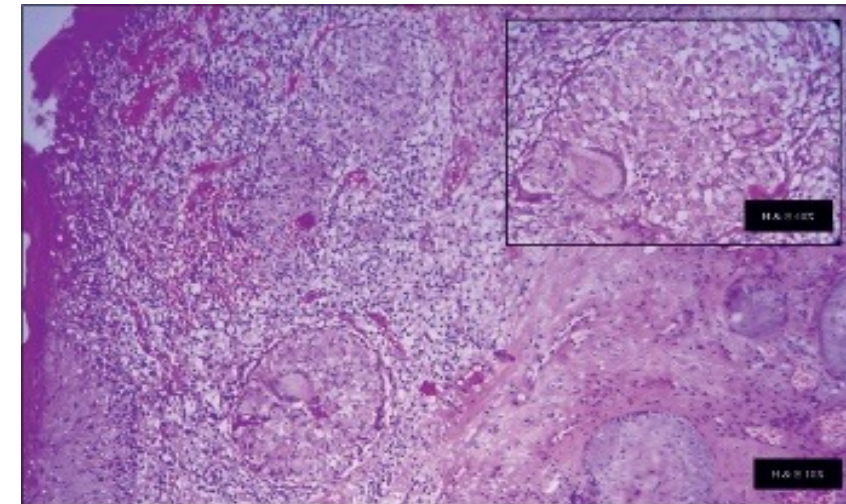


Granulomatous Cheilitis



Orofacial Granulomatosis (OFG)

- Swelling of soft tissues of the oral and maxillofacial region
- Non-caseating granulomatous inflammation





Impact of OFG and Oral CD

- Pain
- Difficulty in eating
- Disfiguring lip swelling
 - Psychosocial distress
 - Subject to bullying

Ni Riordian R Oral Dis 2011 ;17(3):265-9.

Orofacial Granulomatosis (OFG)

Is it a separable disease from oral CD ?



OFG Vs Oral CD –clinical features



	OFG	Oral CD
Lip involvement	+++	++
Oral ulceration	+	+++
Persistent swelling	+++	+
Atopy/food allergy	++	+/-
Gastrointestinal symptoms/Disease	+/-	+++

Andrew Zbar, Shomron Ben-Horin ,Rami Eliakim

Journal of Crohn's and Colitis (2012) 6, 135–142

OFG Vs Oral CD - histomorphology

	OFG	Oral CD
Non caseating granulomas	+++	+++
Loose macrophage clusters	-	+
Granulomatous lymphangitis	-	+
Fibrosis	+/-	+
Th Cell predominance	Th2	Th1
T cell clonality within lesions	+	-
IgA abs to Saccharomyces	-	+

Andrew Zbar, Shomron Ben-Horin ,Rami Eliakim

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Can OFG coexist with intestinal CD ?



CD in patients with OFG



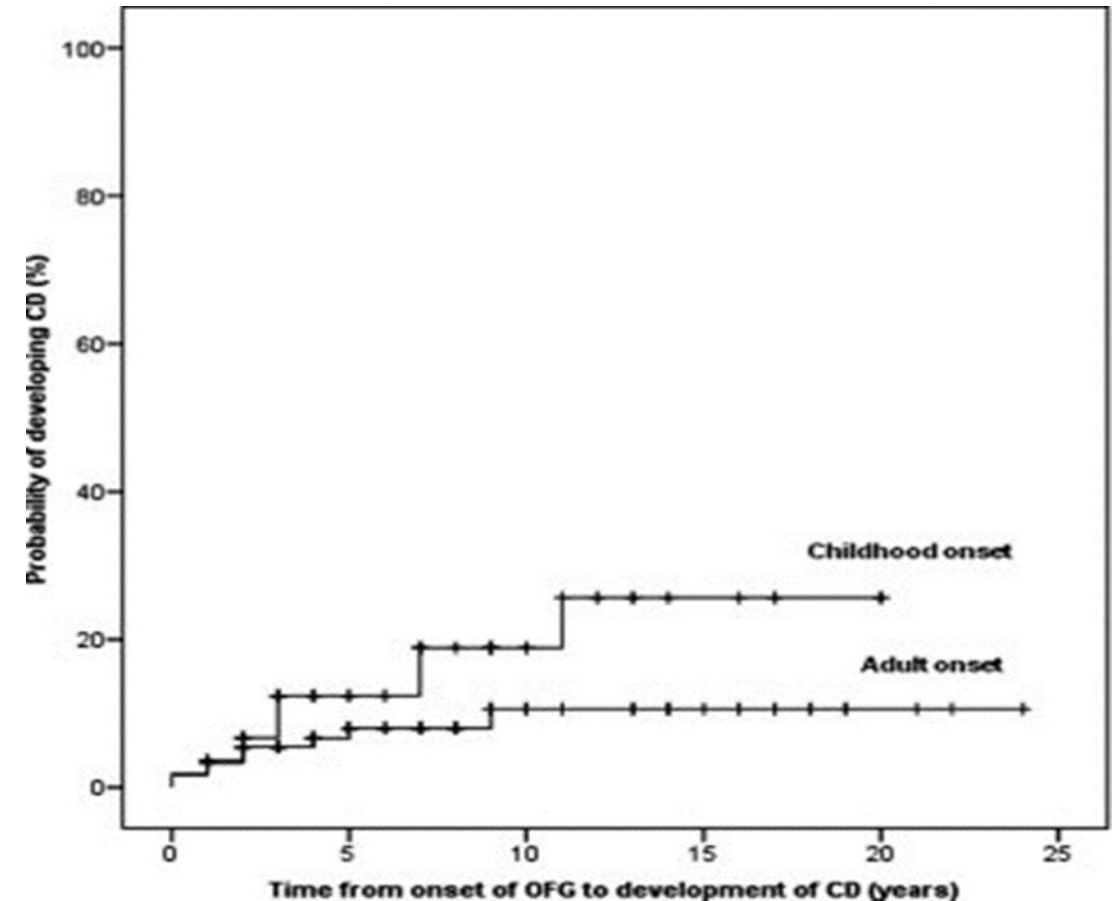
35 patients with OFG and no gut symptoms

- **Abnormal endoscopy in 19/35 (54%)**
- **Abnormal biopsies with granulomas in 13/19 (64%).**
- **Severe oral inflammation**
 - **More likely to have intestinal inflammation**
 - **Histologic severity of oral inflammation correlated with severity of gut inflammation ($P = 0.047$).**

Sanderson J et al *Inflamm Bowel Dis*, 2005;11(9) 2005,840–846

Probability of developing CD in OFG

- **207 patients with OFG over a 30 year period**
- **22 % had coexistent CD**





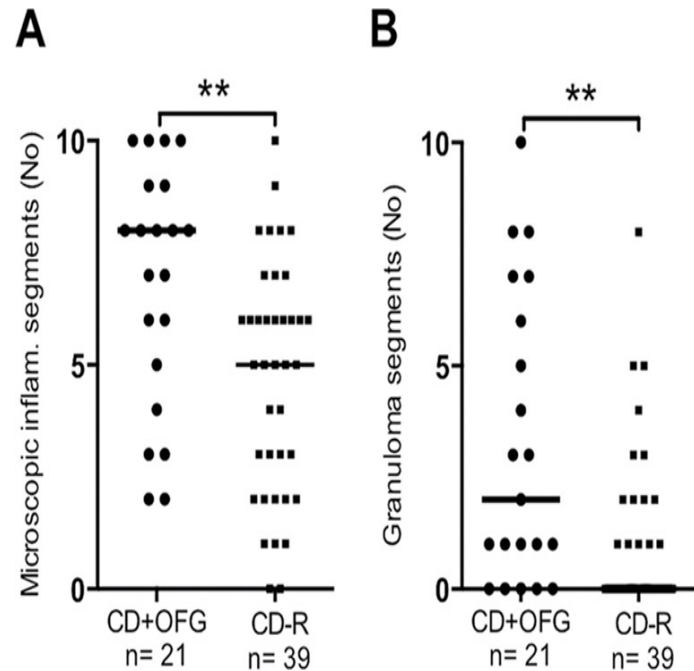
Higher risk in children

- **173 children with OFG**
- **Mean age of onset 11.1 ± 3.8**
- **40 % developed CD**
- **Over half with no luminal symptoms**
- **Mean interval to CD diagnosis 13 months**

Bidirectional endoscopy in children with OFG

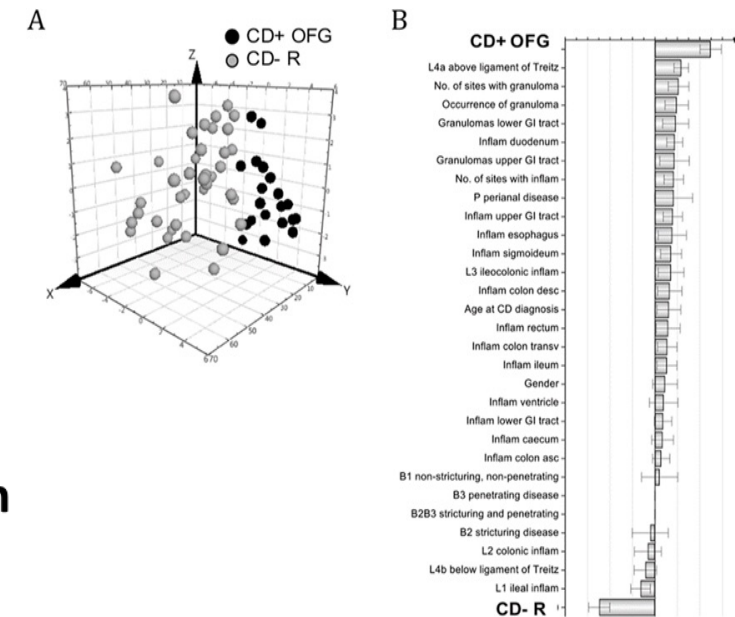
Lazzerini M et al. W J Gastroenterol 2014; 20:7497-7504

Does Crohn's disease with concomitant OFG represent a distinct disease subtype ?

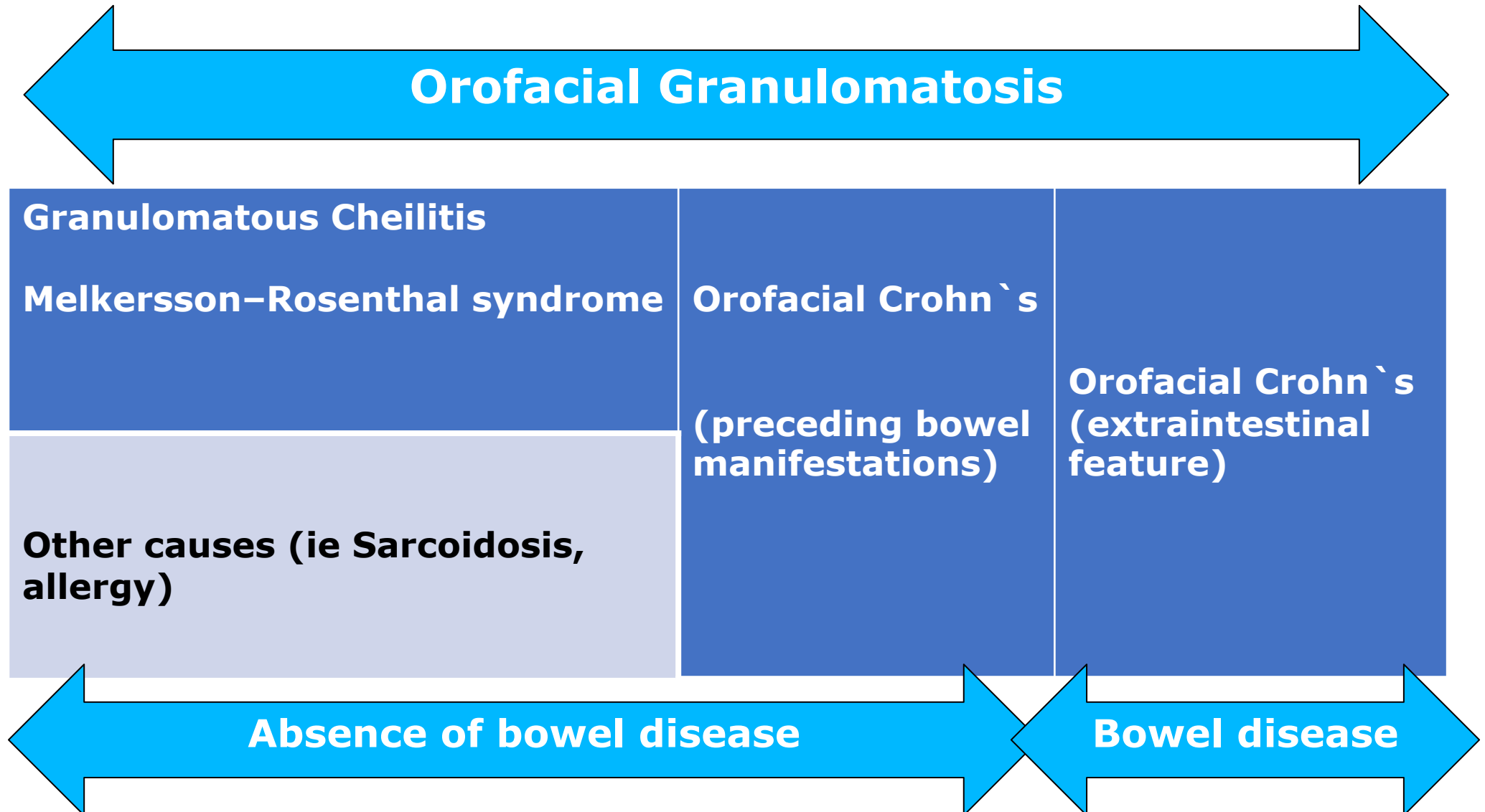


In those with OFG+CD vs CD alone

- More upper GI disease
- More ileocolic inflammation
- More perianal disease
- More granulomatous inflammation



Evolving spectrum of OFG and oral CD



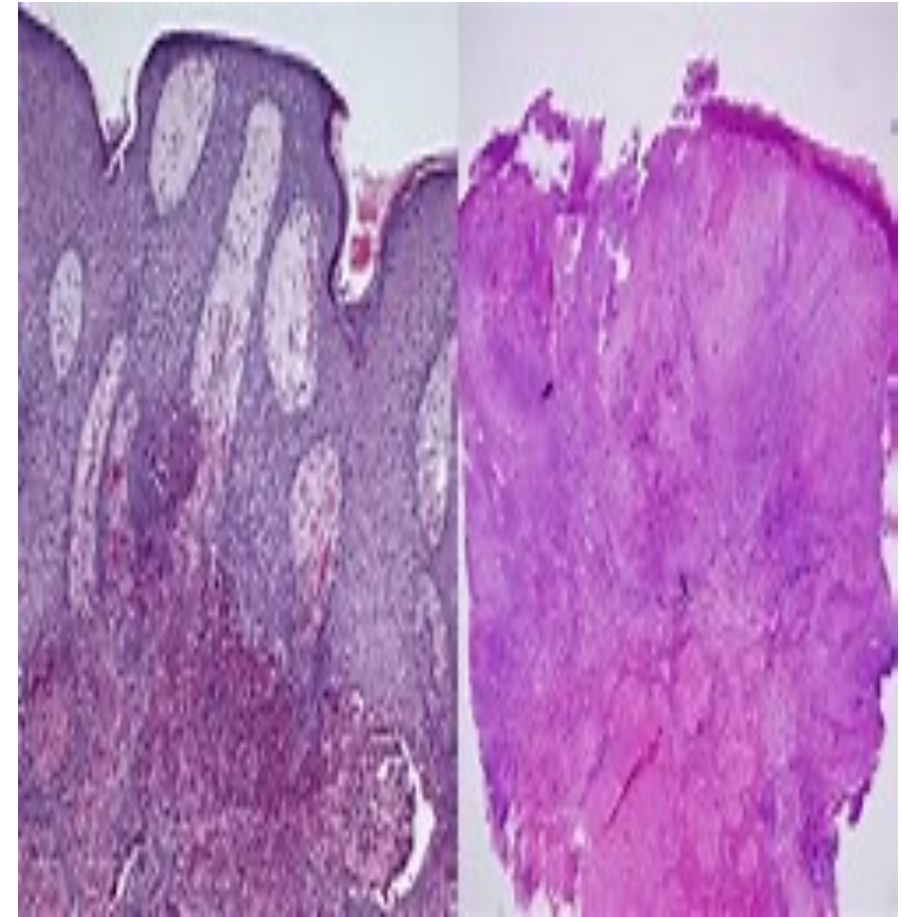
Pyostomatitis Vegetans (PV)

- Associated with IBD in 75%
- Multiple pustules and superficial erosions
- `Snail tracks` appearance
- Spectrum of neutrophilic dermatosis



Pyostomatitis Vegetans – histology

Profound eosinophilic infiltration within micro-abscesses



Approach to oral lesions in CD



Highly specific	Highly suspicious	Non specific
Orofacial CD Granulomatous cheilitis Pyostomatitis Vegetans	Tag like lesions Cobblestoning Lip swelling with vertical fissuring Deep lineal buccal sulcal ulcers	Malabsorption Infections Drug related others

Oral lesions highly suspicious for CD



**Gingival hypertrophy
with tag like lesions**



Cobblestoning



**Deep linear ulcers
buccal/labial mucosa**

Lesions highly suspicious for CD



Lip swelling with vertical fissures



Midline lip fissuring



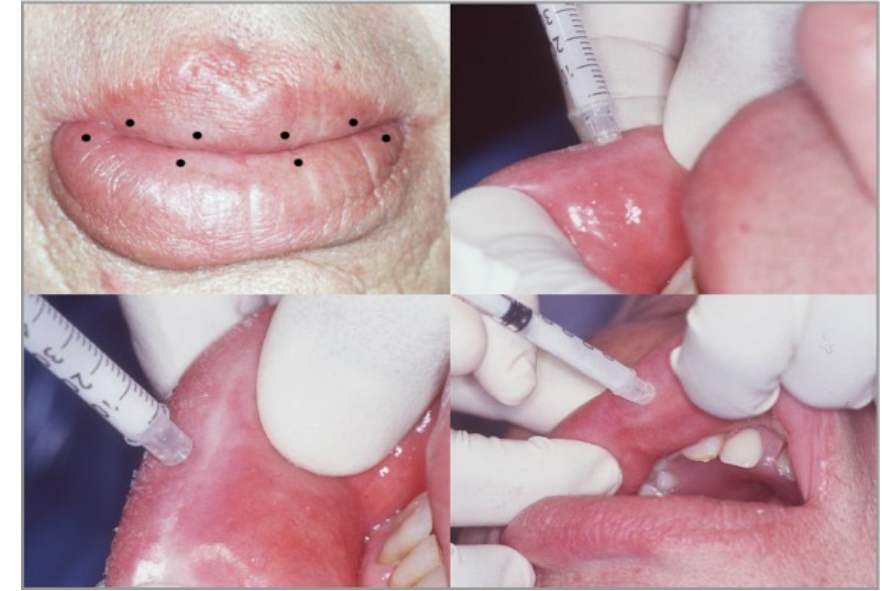
Management of OFG & Orofacial CD



- **Control of intestinal disease**
- **Medical**
 - **Topical**
 - **Dietary management**
 - **Systemic**
- **Surgical**

Topical treatments for OFG and oral CD

- Mouth washes
- Local ointments
 - 1% hydrocortisone
 - Topical tacrolimus
- Intralesional injections
 - Triamcinolone 0.1%



- 22 patients, Single session
- 91% improvement
- No recurrence in 14 (64%)

Dietary approaches to OFG and oral CD



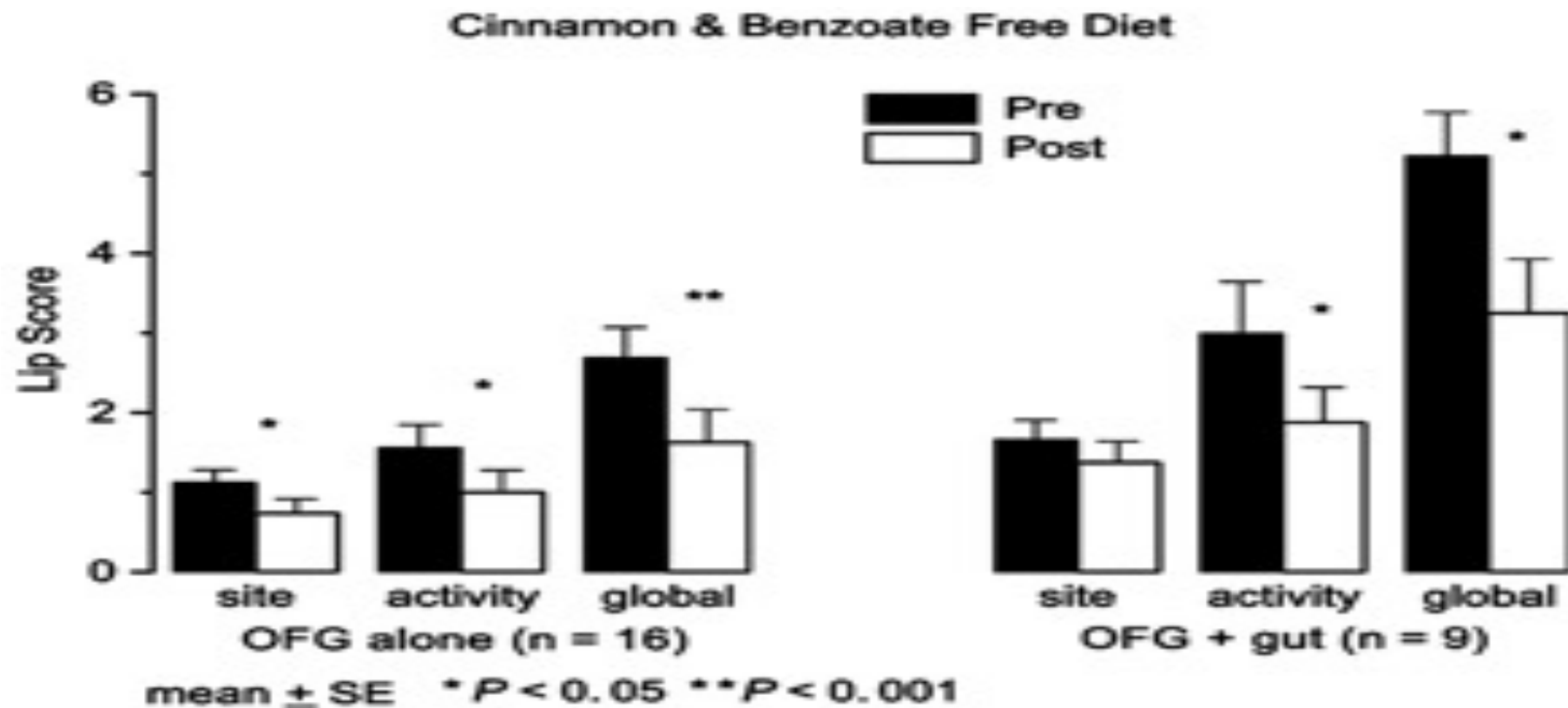
Orofacial granulomatosis caused by cinnamon flavouring: cinnamon products as a possible etiologic factor in orofacial granulomatosis

Endo H, Terry D Med Oral Patol Oral Cir Bucal 2002; 12:E440-4.

37 well-documented cases of cinnamon-induced contact stomatitis

Twelve patients showed clinical characteristics of OFG
8 had histological changes of OFG

Cinnamon & Benzoate free diet



White et al Inflamm Bowel Dis, 2006;12(6):508–514

Review : cinnamon- and benzoate-free diet as a primary treatment for orofacial granulomatosis

AP&T

Alimentary Pharmacology
and Therapeutics

H. E. Campbell M. P. Escudier P. Patel S. J. Challacombe J. D. Sanderson M. C. E. Lomer

- Cinnamon- and benzoate-free diet provide benefit in 54–78% of patients
- 23% requiring no adjunctive therapies.
- Associated gut involvement does not predict response



Systemic treatment of OFG and oral CD

- Combination of systemic steroids + azathioprine
- Approximately 50% response

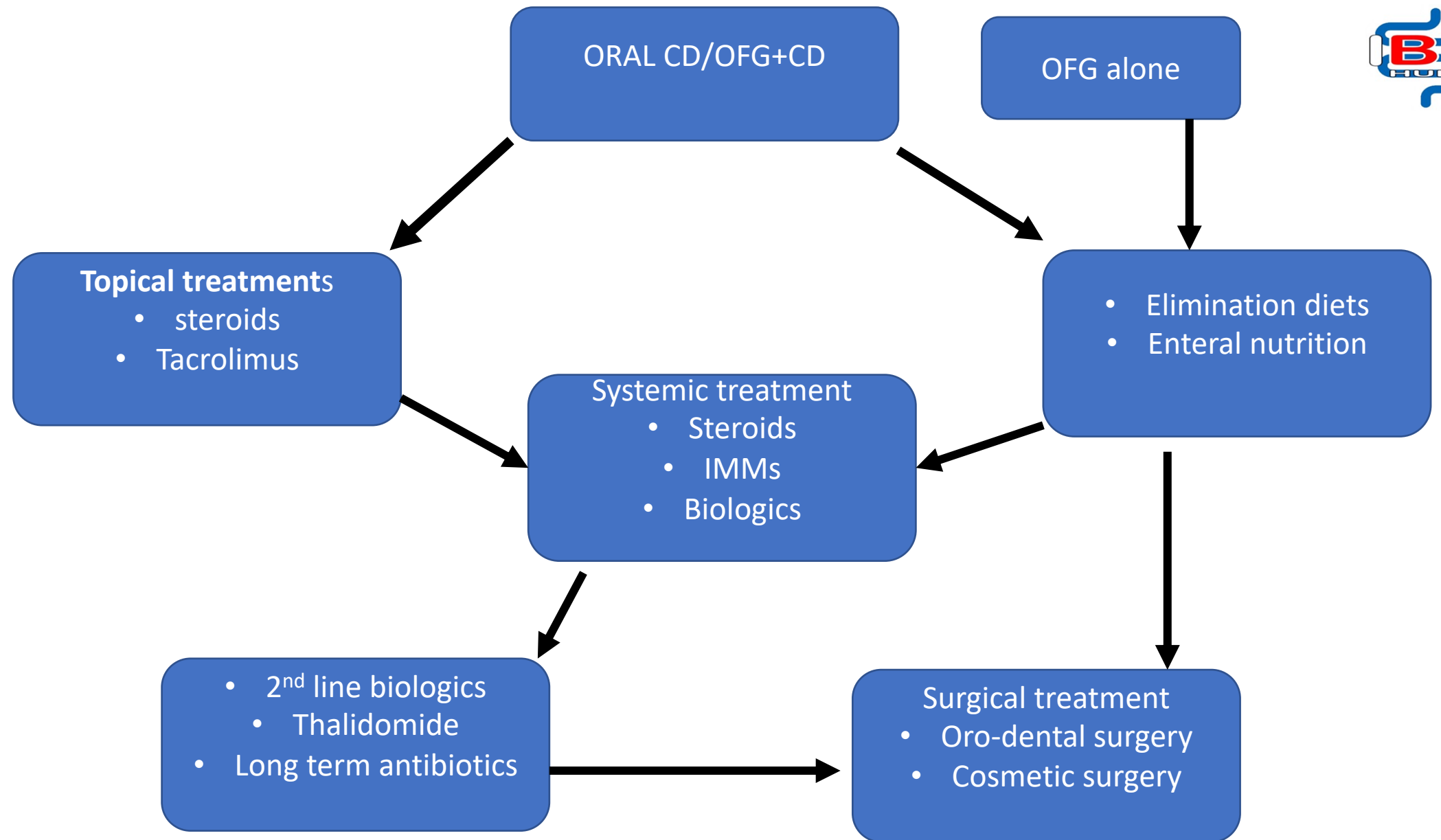
Cardoso H, Inflamm Bowel Dis 2006; 12:337–8.

Anti-TNFs for OFG



Elliot T et al J Oral Pathol Med 2011;40(1):14-9.

- **14 patients (7 OFG+CD)**
- **Response**
 - **Short term – 71%**
 - **1year -57%**
 - **2year -33%**
- **Sulcal involvement predicted response**
- **Intestinal CD did not predict response**

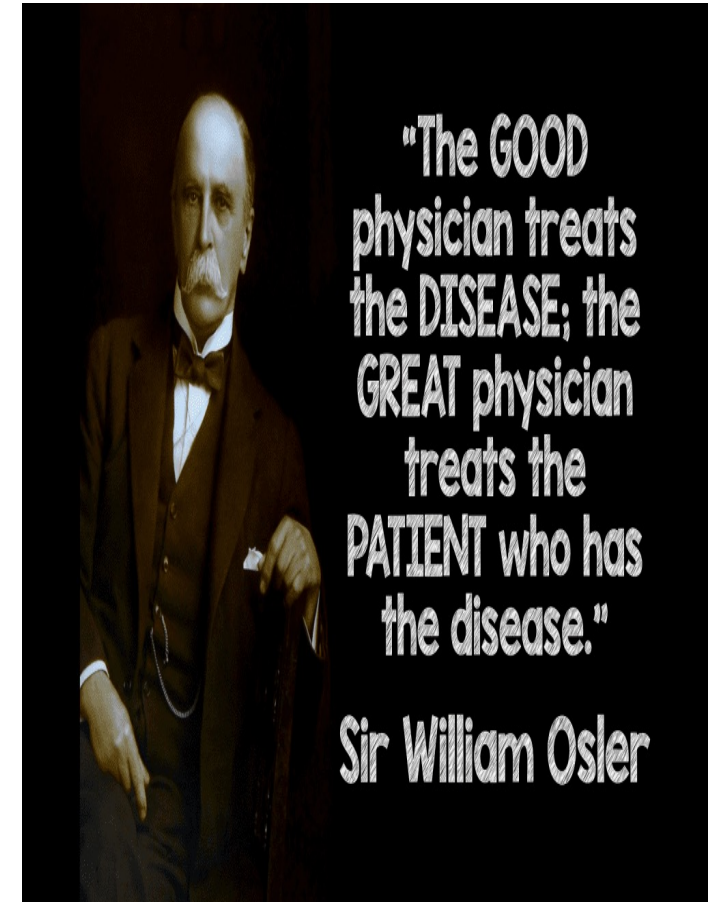




Summary

- Evident association between IBD and oral lesions
- Spectrum of specific and non specific lesions
- Relationship with OFG and CD
- Individualized approach to therapy

`Your mouth is a mirror of your body`



15th National IBD
Nurse Forum 2021

**EVER INCREASING CIRCLES
THE EVOLUTION
OF THE IBD
NURSING ROLE**

FERRING

PHARMACEUTICALS

