

#AAD2019



IN 77TH AAD CONGRESS

1-5 MARCH 2019

\* WASHINGTON \*

Immune mediated dermatosis: urticaria, hidradenitis
Dr. Antonio Martorell



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# HIGHLIGHTS IN CHRONIC URTICARIA: NEW INSIGHTS IN OMALIZUMAB



\* WASHINGTON \*

### Omalizumab and antiviral response

Omalizumab can ameliorate the inadequate antiviral response in children with severe asthma
are more susceptible to virus-induced asthma exacerbations, particularly those with higher
serum IgE levels An IFN restoration by a IgE-blocking?

### **Omalizumab and partial responders**

- Dosing every 2 weeks in poor or non-responders
- Delayed response in some patients
- Characteristics of responders Vs non responders:
  - Serum IgE level may predict likehood of response to omalizumab
    - Non-responders have low baseline total IgE levels
    - Increase in IgE levels at 4 weeks is significantly less in non-responders
    - Two-fold or more increases in total IgE levels in the 1<sup>st</sup> 4 weeks of treatment increases likelihood of response

# HIGHLIGHTS IN CHRONIC URTICARIA: NEW INSIGHTS IN OMALIZUMAB



### Omalizumab and time to response

- Serum autoreactivity (ASST, BHRA) predicts time to response to omalizumab therapy
  - Quick response occurs in patients with type 1 autoinmmune CSU
    - IgE antibodies to autoantigens
    - Immediate binding of omalizumab to soluble IgE
  - Slow response occurs in patients with type IIb autoimmune CSU
    - -ASST (Autologous serum skin test) + BHRA (Basophil histamine release assay) +
    - IgG anti FcεRIα protein antibodies
    - Membrane FcεRIα decays slowly over several weeks in response to omalizumab

	BHRA+	ASST +
Fast responders	1 of 38 (2.6%)	12 of 33 (36.4%) p<0.001
Slow responders	8 of 17 (47.1%)	11 of 13 (84.6%) p<0.01

### HIGHLIGHTS IN CHRONIC URTICARIA



#### \* WASHINGTON \*

### Dapsone and Chronic Urticaria (CIU) and autoinmune urticaria (AIU)

- 79 pts with CIU (n=45) or AIU (n=34)
- Dapsone doses, 25-200 mg/d
- Improvement in 80% CIU and 76% AIU in a mean of 1.1 months
- Complete response, 44% CIU: 50% AIU
- \*Stop in 18 cases, 10 remained hive free

## Dapsone in resistant CIU (Rush experience from Garritson, Troiani, Haugen and Tharp)

- 56 pts with antihistamine resistant CIU
- All had neutrophils/eosinophils on bx (PPU)
- 84% treated with systemic steroids (5-60 mg/d) for disease control
- All treated with dapsone (75-250 mg/day)
- 88% clear or markedly improved: mean, 39 weeks
- 39% completely clear (4-39 months)
- 87% able to discontinue systemic steroids



# HIGHLIGHTS IN HIDRADENITIS SUPURATIVA HORMONAL AND METABOLIC DISREGULATION IN HS: MANAGEMENT TOOLKIT



\* WASHINGTON \*

### Metformin for all HS patients?

## **Properties**

- Decreases ovarian androgen production
- Increases insulin receptor sensitivity
- Improves glucose utilization by muscles and adipocytes
- Decreases hepatic glucose production
- Antioxidant properties
  - Platelet anti-aggregating effects: reduce rate of formation of advanced glycation end products & decreases cellular oxidative reactions

### Dosing

- Polycistic ovarian syndrome dosing
  - 1500 to 2000 mg/day
  - Start at 500 mg daily (with the evening meal), titrate up by 500 mg every 2-4 weeks depending on GI side effects (up to 53%)
- Meformin (Extended Release) \*off label use\*
  - Better GI side effect profile (12.5%)
  - Once daily dosing

Lactic acidosis symptoms! Subtle onset, with malaise, mialgia and somnolence

### HIGHLIGHTS IN HIDRADENITIS SUPURATIVA



MAGUILIOTOL +

Acta Derm Venereol 2014; 94: 553-557

CLINICAL REPORT

The Influence of Body Weight on the Prevalence and Severity of Hidradenitis Suppurativa

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### LETTER TO THE EDITOR

### Occurrence of hidradenitis suppurativa and phrynoderma after bariatric surgery

### Remission of hidradenitis suppurativa after bariatric surgery

CASE REPORT



Catriona Gallagher, MB, BCh, BAO, Shivashini Kirthi, MB, BCh, BAO, Thomas Burke, MB, BCh, BAO, Donal O'Shea, MB, BCh, BAO, MD, Anne-Marie Tobin, MB, BCh, BAO, BScPharm, PhD Dublin, Ireland

Table 2 Vitamin D and zinc micronutrients in post-BS and typical hidradenitis suppurativa patients.

Characteristics	Post-BS HS (n = 12)	Typical HS $(n = 62)$	P
Age, median (range)	46.1 (30–58)	33.9 (18–67)	< 0.01
Sex, M/F	6/6	25/37	> 0.05
Hurley stage, n			
T. Comments	4	36	0.20
II-III	8	26	
BMI, kg/m <sup>2</sup> ; mean ± SD	32.9 ± 8.1	25.9 ± 5.5	0.01
Obese, n (%)*	6 (50)	15 (24.2)	0.08
Active smoking, n (%)	6 (50)	26 (41.9)	> 0.05
Vitamin D deficiency, n (%)†	6 (50)	30 (48.3)	> 0.05
Vitamin D serum levels, ng/mL, median (IQR)	31.1 (12.7)	31.3 (14.6)	0.8
Zinc deficiency, n (%)‡	8 (66.7)	21 (33.9)	> 0.05
Zinc serum levels (mcg/L), median (IQR)	42.5 (49.2)	83.0 (31)	< 0.01

BMI, body mass index; BS, bariatric surgery; IQR, interquartile range. \*BMI > 30; †level < 30 ng/mL; ‡level < 70 µg/L.

- 12 patients with incident HS who had undergone a BS procedure
- Weight loss related to malabsorptive bariatric procedures.
- Multiple micronutritional deficiencies and insufficient responses to standard, first-line antibiotic treatments.
- Zinc, significantly lower in post-BS patients with HS compared with typical patients with HS.

1: Garcovich S, Di Stefani A, Capizzi R, Massi G, Peris K. Occurrence of hi1: Garcovich S, Di Stefani A, Capizzi R, Massi G, Peris K. Occurrence of hidradenitis suppurativa and phrynoderma after bariatric surgery. J Eur Acad Dermatol Venereol. 2016 Jul;30(7):1215-7. doi: 10.1111/jdv.13140. Epub 2015 Apr 16. PubMed PMID: 25879252.

2: Garcovich S, De Simone C, Giovanardi G, Robustelli E, Marzano AV, Peris K. Post-bariatric surgery hidradenitis suppurativa: a new patient subset associated with malabsorption and micronutritional deficiencies. Clin Exp Dermatol. 2018 Aug 24. doi: 10.1111/ced.13732.