165 CXCL1 Levels as a Biomarker of Systemic

Inflammation in Severe Asthma

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RATIONALE: This study assesses the activity of systemic inflammation

by evaluating the level of fractalkine CX3CL1 (Fr) in patients with asthma

(As) alone or in combination with diabetes mellitus type 2 (DM2T).

METHODS: 49 patients (Pts) with severe As were assessed, divided into:

Group (Gr) 1 Pts with isolated As (18 Pts) and Gr 2 had As + DM2T (22

Pts). The control Gr included 9 volunteers. Fr levels were measured.

RESULTS: In Gr 1, the median level of Fr was 47.00 ng / ml; in Gr 2 –

99.60 pg / ml, and in the control Gr - 45.11 [42.83; 45.75] pg / ml. Analysis

of duration of AS and Fr level showed a relationship in pts with As history

more than 10 years (p <0.01). Changes in Fr during the period of

exacerbation and onset of exacerbation duration revealed an average value

of 95.3 6 7.58 pg / ml for the As group, with Fr a prognostic marker for

onset duration. Levels of Fr in As patients is statistically significant (p

<0.001) exceeding the levels in the control Gr. There was a progressive

increase in the level of Fr with addition of comorbidity in the Gr of patients

with concomitant DM2T, being 2.2 times greater compared to control Gr.

CONCLUSIONS: CX3CL1 levels are increased in As with DM and are

indicative of exacerbation and increase with durations of exacerbation of

AS.

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Abstracts