[002] TREATMENT OF THE ACUTE CHARCOT ARTHROPATHY IN NON-SELECTED OUTPATIENT COHORT: RESULTS OF 8-YEAR EXPERIENCE

<u>Vadim Bregovskiy</u>¹, Anastasia Demina², Irina Karpova²

Aim: To analyze the results of the treatment in patients with the active Charcot arthropathy (ACA). Method: 141 patients (males/females: 68/73; type 1/2: 78/63) with ACA (stage 0-29; stage 1-112) and without foot ulcer at the first presentation were followed until healing of destructions (non-active stage, NASA). Median duration of ACA before first visit -2,25 months (0-18). Criteria of NACA were as follows: absence of edema, redness and the temperature difference between feet less than 2 degrees of Celsius accompanied with coalescence on X-ray and absence or slight bone marrow edema on MRI. 78 pts. were under the treatment (68 pts. were casted, 10 used walkers), 63 pts. refused of treatment but agreed to be under the follow-up.

Results/Discussion: Main causes of refuse were: distrust to doctor (39,13%), problems with employment (33%), home or family problems (17,4%), concomitant pathology (10,47%). Mean healing time in the treatment group and in "refusers", respectively: 11,4±6,8 months and 17,3±8,9 months (p<0,001). Healing time did not depend on the stage of ACA and was longer in pts. used walkers vs. contact casts: 13,8±7,3 vs. 11,2±6,5 months (p<0,02). The final foot deformities in pts. with stage 0 vs. stage 1: light (90% vs. 44,9%), moderate (10% vs. 22,4%) and severe (0% vs. 32,7%); p<0,01 for inter-group difference. Age, diabetes type, gender, clinical parameters of diabetes and its complications did not influence on the time of transition ACA to NACA. The higher the quantity of affected foot regions, bones and physical activity of pts, the more severe foot deformities were noticed at the end of treatment (p<0,02). The type of off-loading devise did not influenced on the course of CA. Complications were more frequent in "refusers" compared with treatment group (56,4% vs. 17,5%) and more severe (13,6% amputations vs. 0%). Complication rate in pts. treated with walkers was 3-fold higher compared with those pts. who used casts (p<0,05). Relapses were noticed in 13 pts: their healing time was 15,1±8,4 months. They differed from pts. without relapses only with more high level of physical activity.

Conclusion: 44,7% of patients refused of treatment. A large gap between the onset of CA and beginning of the treatment probably explains long treatment periods and absence of difference in healing times between stages 0 and 1. However treatment in stage 0 is more effective compared with stage 1 in severity of foot deformities. Foot morphology and patient-related factors influenced on the effect of treatment. The use of casts was more safe and effective compared with walkers.

¹Almazov Federal Medical and Research Centre, St-Petersburg City Diabetes Centre, St-Petersburg, Russian Federation

²St-Petersburg City Diabetes Centre, St-Petersburg, Russian Federation