Rational Regimen of Antibacterial Therapy in Short-Term Period for the Patients with Diabetic Foot Syndrome

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The early antibacterial therapy for the patients suffering from the DM with foot ulcer damages is necessary and it has to be administered before the results of bacterial flora are ready.

The aim of present investigations is to elaborate the schemes of the AB therapy for the diabetic foot syndrome (DFS) treatment.

Materials and methods: 84 patients with diabetes mellitus (DM) have been examined in Omsk hospital (West-Siberia region of Russia): 4 patients with DM type I and 80 patients with DM type II (male 28 and female 56). Age ranged from 27 to 81. DM duration ranged from 1 to 32 years. The number of patients with neuropathic form of the DFS is 32 (38%), with neuroischemic form – 52 (62%). According to the Vagner classification the patients in severity of the ulcer damages were systemized as follows: I degree -4(4.8%), II -34(40.4%), III -26(31%), IV -14(16.7%), V -6(7.1%). For the various microorganisms species detecting the following cultures were taken: blood Columbia – agar, yolk-salt agar, Endo medium, CPC medium, Schukevich' method. flora results were as follows: St.aureus – 38,1%, St.saprophiticus – 11,9%, St.epidemidis – 4,7%, Ps.aeroginosae – 9,5%, Ps.rettgeri – 3,7%, Enterococus – 6,8%, E.coli – 4,2%, association St.aureus+ St.saprophiticus – 6,1%, St.saprophiticus+ Str.pyogenes – 4,2%, St.aureus+ P.alcoligens - 2,1%, St.aureus+ Str.pyogenes - 2,9%, St.aureus + St.saprophiticus + Enterococus - 3,5%, Pr.vulgaris + St.saprophiticus - 2,7 %. The antibacterial medications to be taken have been administered for all the patients taking into consideration the sensitivity. The following combinations of the medicines were used: fluorchinolones + aminoglocosides of II-III generations, as well as cephalosporines of II-III generations + linkosomides. The use of 1st combination stopped the infectious process in 72% of cases, the use of 2nd combination – in 76% of cases. The duration of antibacterial therapy was 14-21 days. Drugs in tablets were administered till the full arrest of the infection.

Among 84 patients 2 high amputations, 8 major and 19 minor amputations have been performed. The infectious process was arrested without amputation in 55 patients (65.5%). The supporting foot function has been conserved in 76 patients (90.5%).

Conclusions: ++The use of such combinations as fluorchinolones with aminoglicosides of II-III generations and cephalosporines of II-III generations with linkosomides is preferable in the initial period of the antibacterial therapy of the diabetic foot syndrome. ++Early antibacterial therapy of the ulcer complications in diabetes mellitus patients is the basis of successful treatment and conservation of the supporting foot function.