

Five-fluorouracil improves skin graft take in patients with diabetic foot syndrome.

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Skin grafting provides an effective means of closing acute and chronic wounds but results of grafting performed on diabetic feet are far from satisfactory. Sustained wound bed cell infiltration decrease microvessels growth into graft and prevents it to take. In our previous study we have shown that single low dose of five-fluorouracil reduce neutrophil presence during early stage of wound healing and prolonged proliferative phase in diabetic rats. We assumed that five-fluorouracil may be a means of decreasing inflammatory response and improving graft survival. **Objective:** We examined the effect of 5-fluorouracil on skin graft take in patients with diabetic foot syndrome. **Patients and Method:** Split-thickness skin grafting were performed in 61 patients with granulating wounds which were not primary closed after surgery for foot infection (6 patients had neuropathic foot, 8 - neuroischemic and 47 had ischemic foot). 36 patients received single intravenous injection of 5- fluorouracil 5 mg/kg on day of grafting. Skin grafts were assesed clinically by measurement of the survival area in 2 weeks after grafting and by histologyc study on day 6,9,12,14 after surgery. Grafting failure was considered as a necrosis of more than 50% of graft. **Results:** 91,7 ±4,6% of skin grafts in treatment group compared to 68±9,3% in control group took well ($p < 0,05$ ARR 24%). There was a significant reduction of graft lysis area in treatment group in 14 day after grafting. The histologic study demonstrated decreased inflammatory response and graft necrosis in treatment group. Fibroblasts accumulation and collagen deposition were reduced in treatment group also. **Conclusion:** Five-fluorouracil improves skin graft take in patients with diabetic foot syndrome.