fingers, but it most commonly affects the little finger and ring finger. It can occur in only one hand or in both hands at the same time. The most used treatment approachis surgical resection of the fibrous tissue by limited fasciectomy, but it carries a long recovery period and significant rate of complications. Percutaneous needle aponeurotomy is minimally invasive needle technique, for mild to moderate Dupuytren contractures, with perfect short term results and fast recovery period, with no loss of function and with few complications

Aim of the study. To present our experience with a minimally invasive technique of percutaneous needle aponeurotomy and making recommendations about the safety and efficacy of this interventional procedure.

Materials and methods. Our experience in percutaneous needle aponeurotomy was performed in the Plastic, Aesthetic Surgery and Reconstructive Microsurgery Clinic of the Emergency Medicine Institute. We treated 21 cases with Dupuytren contracture using this procedure, from 2016 to 2019 year. This treatment tend to restore hand function with minimally invasive intervention and to prevent progression, with minimum complications.

Results. Men are more likely to be affected than women, and the symptoms of disease are more severe in older men. The goal of the surgery was to reduce the contracture and improve motion of the affected fingers. After percutaneous needle fasciotomy, pacients quiqly recovered hand function, returning to daily activities. In some cases, to avoid recurences, that acording to different authors are between 12%-73% and also depend on the severity of the disease, percutaneous needle fasciotomy may need to be repeated. Also is important to do regular hand exercises, in obtaining the best results.

Conclusions. Percutaneous needle fasciotomy is a minimally invasive treatment option for mild to moderate Dupuytren contractures in the metacarpophalangeal and proximal interphalangeal joints, and the procedure requires limited resources. Multiple contractures can be treated during the same session and the treatment is considerably easier for the pacient and requires a minimum of rehabilitation, compared with open fasciectomy. Pacients report a greater aesthetical and moral satisfaction.

Key words: Dupuytren's disease, contracture, palmar fascia, percutaneous needle fasciotomy, minimally invasive technique, fast rehabilitation.

124. THE VASCULARIZED BONE ALLOTRANSPLANTATION - IN A RABBIT MODEL, PRELIMINARY REPORT

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Introduction. The use of bone transplant has been a successful step in the treatment of a large number of diseases of the osteoarticular system. But a massive bone defect remains a dilemma for contemporary reconstructive surgery. Contemporary methods that are used, for the reconstruction of the bone structure, have a high level of morbidity and complication. Specialized literature indicates the absence of an optimal solution in massive bone defects healing. Maintaining the osteoplastic properties of the vascularized autograft; combining them

with the orthotopic characteristics of an allogenic bone would be a successful alternative for the reconstructive surgery of the skeletal system.

Aim of the study. To determinate the optimal bone segment for allotransplantation and his sources of vascularization, on the femur in the rabbit model for tissue engineering.

Materials and methods. The study of the vascularization of the femoral bone was performed on laboratory animals (rabbits). After euthanasia and the femoral bone segment harvesting with a soft tissue without destroying the vascularization. In the abdominal aorta was injected contrast material, with the subsequent preparation of the arterial vessels. Followed by anatomical study, radiography, histology, microangiography of this vascularized bone segment. Thus we determined the vascularised bone segment which could be used as one graft for further conservation.

Results. The optimal segment for vascularized allografting (the rabbit model) was the upper third of the femur with the lateral circumflex femoral artery.

Conclusions. The success after bone vascularized allografting is ensured by keeping the circulation on arteria nutricia and microcirculation of blood. The vascular living allogeneic bone without immunosuppression would be a perfect alternative in the treatment of the massive bone defects.

Key words: vascularized bone grafts, bone allograft surgical revascularization, angiography

125. AMNIOTIC MEMBRANE IN THE TREATMENT OF DEFECTS IN DIABETIC PATIENTS

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Introduction. One of the most current and complicated aspects of plastic surgery is the treatment of defects in diabetic patients. The inefficiency of the conservative treatment and the the surgical interventions with the sacrifice of other healthy tissues requires the use of new methods of treatment

Aim of the study. Optimizating the local regeneration in patients with peripheral circulatory disorders using biological materials obtained through tissue engineering

Materials and methods. We initiated a study in a group of 5 patients with peripheral circulatory disorders with chronic non-healing wounds (> 30 day duration). The pacients were selected to evaluate the performance, safety and handling properties of dehydrated human amnion / chorion membrane allograft. All five patients received only one application of dehydrated human amniotic membrane and there were no adverse effects.

Results. Was obtained optimization of local regeneration in patients with peripheral circulatory disorders by tissue engineering methods

Conclusions. The research in this direction will establish the perfect combination of support material for cells and growth factors, for a faster and qualitative epithelialization, thus facilitating epithelialization of ulcers and wounds in patients with circulatory disorders

Key words: diabetes, wounds, tissue engineering