THE ROLE OF THREE PHASE BONE SCINTIGRAPHY IN THE VIABILITY EVALUATION OF MICROVASCULARIZED MANDIBULAR RECONSTRUCTION

AIM: To evaluate by means of bone scintigraphy, osseous viability after microvascularized mandibular reconstruction.

METHODS: Three patients were submitted to bone scintigraphy after mandibular reconstruction in order to evaluate the osseous viability. In two cases the mandibular reconstruction were done after tumour removal and in one after trauma. Case 1: female, 37 years old, submitted to bone scintigraphy 72 hours after removal of a left mandible fibromixoma. Case 2: male, 53 years old, performed bone scintigraphy 7 days after removal of an indifferentiated carcinoma in right mandible. Case 3: male, 39 years, performed the exam 72 hours after a mandibular trauma. The interpretation of the bone scintigraphy was made by comparing the blood flow and the radiotracer uptake in the mandibular reconstruction with the uptake in the bone around.

RESULTS: Bone scintigraphy showed increased or normal blood flow and bone uptake in all cases, suggesting osseous viability. There were no areas without vascularization in the 03 mandibular reconstructions. The scintigraphy pattern had good correlation with the clinical outcome.

CONCLUSION: Three phese bone scintigraphy was usewfull to evaluate the viability of microvascularized mandibular reconstruction in the patients studied. Once well established, this procedure could become a new tool in the follow up of pattients submited to mandibular reconstriuction