

First results of pilot study: osteochondral repopulation induced by extracorporeal shockwaves and intra-articular Hyaluraninjection - Evaluation of 118 patients

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The study referred mainly to knee-lesions: Gonarthrosis, osteochondrosis disecans, acute chondral lesions.

The examination were divided into four groups:

- 1.diagnostic and if necessary surgical arthroscopy, ESWT, Hyaluronan injection
- 2.only ESWT and Hyaluronan injection
- 3.only ESWT
- 4.only Hyaluronan injection

From the outset the study was accompanied by clinical examinations. Follow-up examinations were done four times at three-month intervals.

Examination of the sensitivity to pain by VAS (visual analogue scale) and the functional maximum load by Lysholm and HSS (hospital of special surgery) score were carried at the beginning, three, six and twelve month respectively after, if required, two years.

All groups started with MRI- examination. Control took place after six and twelve month. Previous clinical results:

31 patients Outerbridge - stadium I, all after therapy without complains during a time interval between 3 and 16 months. 25 of this group are sportsmen with state of diagnostic arthroscopy, complains and minimal 1 year with therapy resistance complains, including the end of their sportive activity. All of them do sports again.

43 patients Outerbridge - stadium II, 70% after therapy without complains during the period of treatment from 3 to 24 months. The rest of 30 % only complains after long stress, mainly content.

27 patients - Outerbridge stadium III, significant improvement 65 %, mainly improvement of stress pains and prolongation of the walking range.

25 % of the patients improvement, but remaining complains; a second attempt of therapy is planned.

10 % no change of findings

First results of 18 patients with rhizarthrosis

8 patients stadium I and III

all of them without sequelae

4 patients stadium III

borderline complains

4 patients stadium IV

no improvement