

Shock Waves (SW) Noninvasive Extracorporeal Thrombolysis Treatment (NISWT)

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ABSTRACT

A group of 24 patients were considered for noninvasive shock waves thrombolysis (NISWT). Of these, 15 patients gave their informed consent. NISWT was attempted in eight patients (while seven patients were randomized for follow-up only). NISWT was possible in six of seven patients. In one patient randomized for NISWT, local inguinal scarring, due to previous surgery, made impossible the visualization of the femoral vein, and therefore focusing of shock waves (SWs). No side effects were reported in the days after SWs administration during the 4-month follow-up. In patients treated with NISWT it was possible to observe just after the SWs session the presence of echolucent "acoustic holes" and flow (by color and power Doppler) within the "holes." All "echolucent holes" produced at the first session were still present at 4 months, and color flow imaging also detected new flow channels in echogenic areas of thrombi previously not visible. In one patient thrombolysis was achieved after the first treatment, but at 3 and 4 months the thrombus was completely avascular. In conclusion, thrombolysis using SWs was obtained in selected cases and it was still persisting at 4 months in six of the seven treated patients. NISWT appears feasible and promising. These results should be confirmed by larger, prospective trials.

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