

Beginning of Analgesia as a Key Variable in Shockwave Biosurgery

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Even though the therapeutic success of shockwaves in urology, orthopaedics and plastic surgery is a fact, and that new applications under research in cardiology and infectology are promising, there are still tendencies of insurance companies of not approving treatments, perhaps by novelty and cost issues. There is a clear necessity of establishing parameters for the creation of homogenous protocols for ESWT as well as to predict evolution.

We performed an experimental study from September 2004 to May 2005 in 127 patients who received ESWT for different pathologies. Clinical and radiographic parameters, VAS, and patient's satisfaction level were evaluated. Follow up was performed every six weeks for a total period of six months (first stage of study).

Descriptive and inferential statistical analysis was performed, based on Pearson's coefficients of correlation and Chi Square analysis.

There was a low correlation (0,02) between number of waves necessary for beginning of analgesia and time of evolution. There also was a clear dependency between level of satisfaction and number of waves at the beginning of analgesia. This last parameter was also dependent with the type of pathology (significance level of 0.001).

The number of necessary waves for the beginning of analgesia, as well as the total number of shockwaves is variable and depends on each pathology, but not on time of evolution. The number of necessary shockwaves for beginning of analgesia could be an useful parameter in predicting the evolution, and treatment protocol in each case. However, further studies are necessary to validate this variable.