DSKESWT

FACT SHEET

The effect of shockwave on coccydynia

INTRODUCTION

Coccygodynia or coccydynia pain is a condition that most frequently occurs after a fall or impact to the coccyx, after difficult childbirth or long-term irritation of the coccyx e.g. cycling. (1)

A normal course of treatment typically consists of ordinary relief on a ring pad, manual treatment of surrounding tissue and/or steroid injection into the joint.

METHOD

Studies have been searched for and selected in the following way:

extracorporeal shock wave therapy AND coccydynia. Filter: review, systematic review, meta-analysis, human, English

5 articles, none relevant, therefore new search on google scholar "extracorporeal shock wave" therapy in coccydynia. Filter 2018-2023,
review: 25 hits 1 meta-analysis specifically on ESWT (look for the reference section)

Nikouei, Farshad MD; Shakeri, Mohammadreza MD; Ghandhari, Hasan MD; Motalebi, Mohsen MD; Ameri, Ebrahim MD. The effect of extracorporeal shock wave therapy in coccydynia: a systematic review and meta-analysis. Current Orthopaedic Practice 33(6):p 613-618, November/December 2022.(2)

RESULTS

A total of 4 studies were included with pooling of 119 patients, of which 81 were treated with shockwave and 38 received other treatments. 2 of the studies did not have a control group as these were Quasi–experimental and 2 RCTs
1 study included used focused ESWT (fESWT) and 3 studies used radiating ESWT (rESWT)
The treatment effect is measured after 1 month, between 2-4 months after treatment and between 6 and 12 months after treatment.

Measurement assessment tool in the study is the Visual Analogue Scale (VAS)

Below is an overview of the methods and effects of the included studies.

STUDY	DOSE	CONTROL GROUP	EFFECT	METHOD
Lin et al (2015) (3) rESWT	5Hz, 3-4 bar 2000 pulses 4 treatments 1 week apart	Interferentiel current & shortwave diathermy	There is improvement in both groups and are not statistically significant.	In the prone position and probe position in the area of coccygis
Haghighat et al (2016) (4)rESWT	21Hz, 2 bar 3000 pulses 4 treatments 1 week apart	Nobody	Good effect on pain but only a small study population	In the prone position and probe position in the area of coccygis
Gönen et al (2020) (5)fESWT	**fESWT 0,2mj/mm2 3000 pulses** **4-10 treatments 1 week apart**	**Nobody**	**Almost everyone had their pain reduced to about VAS 3.0**	In the prone position and probe position in the area of coccygis
Ahadi et al (2021) (6) rESWT	5Hz, 3-4 bar 2000 pulses 3 treatments 1 week apart	Steroid Injection	Longer lasting effect of ESWT than steroid injection	In the prone position and probe position in the area of coccygis

The authors' own conclusion, when comparing all the results found in the included studies:

” In this study, ESWT appeared to be useful in relieving the pain of coccydynia and more effective in reducing pain syndromes than the use of physical modalities. Therefore, ESWT is recommended as an alternative method for treating patients with coccydynia ”

CONCLUSION

The included studies indicate that ESWT may have a beneficial effect in both the short and long term. This applies to both types of ESWT. One study used steroid injection, which is also recommended, however, rESWT was better in the long term. However, it must be important to take into account the small amount of studies and only 50% had a control group. Although the effect is positive and beneficial to ESWT, there is still a lack of studies with a larger population.

RECOMMENDATION

Based on the above conclusion, the company can recommend ESWT as part of the treatment of coccyx pain. This is taken into account that there are not many treatment options and that the studies show good effect. It should be pointed out that the patient's pain condition must be taken into account before using radiating shock wave due to the mechanical impact, here focusing ESWT can be advantageously used initially.

The treatment regimen will consist of a minimum of 4 treatments approx. 1 time per week.
rESWT will have a dose of 5Hz 3-4 bar with approximately 2000 pulses around coccygis and nates and patient in prone position
fESWT will be 6-8Hz, 0.2mj/mm2 3000 pulses in the joint and patient in the prone position.

However, reservations must be made for the patient's pain condition and never exceed this.

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