A novel treatment of chronic perineal pain in a woman by Extracorporeal shock wave therapy (ESWT)

TUNG CW (1), CHEON WC (1), TONG WM (1)
(1) Department of Obstetrics and Gynaecology, Queen Elizabeth Hospital

Keywords:
Perineal pain
Shockwave

Introduction
Perineal pain is one of the most problematic clinical conditions to female patients as it causes discomfort and associated with disturbance in sexual function, voiding and bowel movement. Commonly employed treatment for chronic pelvic pain includes various analgesics such as Non-steroidal anti-inflammatory drugs (NSAID), opioids and Gabapentin. However, most patients found themselves having suboptimal pain control. To our knowledge, Extracorporeal Shock Wave treatment has been used in male chronic pelvic pain and various neuromuscular pains for years. However, it has not been applied in women for similar condition. We postulate that ESWT, through similar anatomical and physiology effect, may offer a new choice of treatment for female patients with chronic perineal pain.

Objectives
To determine the clinical efficacy in treatment of female perineal pain by ESWT.

Methodology
The machine used in this case was manufactured by Storz Medical AG, Switzerland named Duolith tower SD1 with 4 cm2 probe size delivering energy ranged from 0.01 – 0.55mJ/mm2 (Figure A). Each treatment composed of 3000 focused shock waves with 750 pulsation each at bilateral upper thigh (4cm from clitoris) and at bilateral lower thigh (4cm below the upper treatment region) region. The energy level was set at 0.25mJ/mm2 and the frequency was set at 3Hz. This treatment modality was used according to the usual recommended dosage and frequency in treatment of male chronic pelvic pain syndrome4. The overall treatment duration for each cycle lasted for around 20 minutes and repeated in monthly interval. The treatment was performed without any anesthesia or analgesia. The outcome were measured by Visual Analogue Scale and Short form 36 health survey.
**Result**
During the pre-treatment period patient gave score 8 on the VAS. After the 1st cycle of treatment, the pain score was reduced to 6. The treatment cycle was continued for 11 months from June 2012 to May 2013. The clinical VAS response was given at range of 6-7 during the first 6 months by the patient. However, she had reduced 50% of oral analgesics consumption compared with pre-treatment period. The VAS was further reduced to 3 at 7th to 11th cycles of treatment. During the latest follow-up assessment on December 2013, she reported the termination of analgesics consumption and graded score 2 on the VAS pain score. The Short Form 36 (SF36) Health Survey is used retrospectively to assess the overall health implications for this patient before and after ESWT (Table 1). Overall we found that she had best percentage of improvement in Bodily Pain (BP), Mental Health (MH) (32%) and Social Functioning (SF) (30%) scale. There was no complication of discomfort encountered during the whole treatment period.