

به نام خدا

PTNS (percutaneous tibialis nerve stimulation)

Dilemmas in treatment

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PTNS

Remain the main stay of treatment for patients with F.I. who fails to respond to available conservative measures.

PTNS

Percutaneous



transcutaneous



PTNS

Hold promise to be an effective , patient friendly , safe and cheap treatment.



PTNS

Gaining slowly acceptance

PTNS

Efficacy of the percutaneous PTNS approach are far more than transcutaneous (qualtero) method

PTNS

Usually unilaterally , and nerve is just above and behind the medial malleolus

PTNS

Lack of effective and standardized treatment protocol

PTNS

Once or twice in a week , for 6 or 12 weeks?

PTNS

The national institute of clinical excellence (NICE) suggests both patterns could be adapted depending on patient responses.

Table 1Posterior tibial nerve stimulation evidence summary *n* (%)

Ref.	Patient (<i>n</i>)	Type of PTNS	Time, frequency and duration of therapy	Follow- up	Stimulation endpoints	Efficacy	Study classification
Shafik et al[5]	32	Pct	30 min, alternate days 4 wk	22 mo	Motor	27 (84)	Nonrandomised controlled
Queralto et al[10]	10	Tct	20 min, daily 4 wk	4 mo	Motor	8 (80)	Prospective uncontrolled
Mentes et al[43]	2 ¹ (spinal)	Pct	30 min, alternate days 4 wk	3 mo	Motor	2 (100)	Prospective uncontrolled
Vitton et al[22]	12 ² (IBD)	Tct	20 min, daily 12 wk	3 mo	Sub sensory	5 (42)	Prospective uncontrolled
Babber et al[44]	8	Pct	30 min, weekly 12 wk	3 mo	Not specified	7 (87)	Prospective uncontrolled
De La Portilla et al[41]	16	Pct	30 min, weekly	6 mo	Motor and sensory	10 (62)	Prospective uncontrolled

PTNS

Dilemmas in stimulation endpoint

PTNS

Intensity of stimulation is turned down to just below the threshold required for motor contraction. (TC.PTNS)

PTNS

PC.PTNS can causes a sensory and a motor response.

PTNS

The presence of a combined motor and sensory response to be better associated with a successful outcome

PTNS

Confident multicenter randomized controlled trial presently under way in the U.K. utilizes either a sensory or a motor response as an endpoint for stimulation.

PTNS

No doubt regarding the short term efficacy of PTNS which are comparable to that of SNS

PTNS

A recent multicenter trial reported no improvements following stimulation and concluded that unilateral transcutaneous PTNS was no more effective than sham stimulation.

PTNS

Bilateral TC.PTNS is effective compared to unilateral.

PTNS

The first PC.PTNS study reported a relapse of symptoms in 29% of patients.

PTNS

All studies on PTNS mention the need for Top-up treatment.

PTNS

The efficacy following TC.PTNS lasts for about 3 weeks post treatment.

PTNS

Regular percutaneous Top-ups has therapeutic effect for urological dysfunction.

PTNS

The efficacy following transcutaneous PTNS lasts for about 3 weeks post treatment.

PTNS

Shafik recommendation:

- 30 mins
- Alternate days
- 4 weeks

PTNS

General consensus that patient require 12 weeks of continuances treatment and that each treatment episode should last 30 mins

PTNS

No apparent differences in efficacy , once a week or twice a week patterns of treatment.

NICE recommendation

PTNS

All percutaneous PTNS utilized unilateral.

PTNS

PTNS dilemmas in treatment

- The main stay of treatment for patients with F.I. who fails to respond to conservative therapies is neurostimulation.
- The main neurostimulation is SNS , (sacral nerve stimulation).
- Posterior tibial nerve stimulation (PTNS) is a relative new option in neurostimulation.
- PTNS is effective , patient friendly, safe and cheap treatment.
- The use of PTNS is slowly gaining acceptance.
- Questions remain unanswered in use of PTNS.
- These have raised dilemmas, as long as the remain unsolved.
- We try to review information on PTNS to solve these dilemmas.