CLAIMS:

1. A method of treating a waste evacuation dysfunction, comprising administering transcutaneous electrical stimulation (TES) to at least one lower pelvic region and at least one sacral region for at least one treatment period per day over a treatment term of at least one week, wherein the TES comprises interferential electrical stimulation.

2. The method of Claim 1, wherein the stimulation is administered for two or three treatment periods per day.

3. The method of Claim 1 or Claim 2, wherein the treatment period is between about 10 minutes and about 90 minutes.

4. The method of Claim 3, wherein the treatment period is between about 20 minutes and about 60 minutes.

5. The method of any one of Claims 1 to 4, wherein the treatment term is between two weeks and three months.

6. The method of Claim 5, wherein the treatment term is between one month and two months.

7. The method of any one of Claims 1 to 6, further comprising repeating the administering for more than one treatment term.

8. The method of any one of Claims 1 to 7, wherein the administering is repeated two, three or four times over a greater term.

9. The method of Claim 8, wherein the greater term is between about four months and about two years.

10. The method of Claim 9, wherein the greater term is between about six months and about fifteen months.

11. The method of any one of Claims 1 to 10, wherein the method comprises providing a portable stimulation device and the stimulation is administered using the portable stimulation device.

12. The method of Claim 11, wherein the stimulation device is battery powered.

13. The method of any one of Claim 11 or 12, wherein the stimulation device is configured to provide the stimulation according to a selected set of fixed stimulation parameters stored in the stimulation device.

14. The method of Claim 11 or Claim 12, wherein the stimulation device has manually operable on/off and start/stop controls but is free of other manually operable controls.

15. The method of any one of Claims 11, 12 and 14, wherein the stimulation device is configured to provide the stimulation according to a single set of fixed stimulation parameters at any time.

16. The method of Claim 15, wherein the stimulation device is configured so that the single set of stimulation parameters may only be replaced with another single set of operating parameters using an electronic configuration interface separate from, but communicably coupleable to, the stimulation device.

17. The method of any one of Claims 13, 15 and 16, further comprising allowing modification of the selected set or the single set of stimulation parameters using only authorised external software that is communicably coupled to the device.

18. The device of any one of Claims 13 to 17, wherein the stimulation device is free of user-actuable controls to modify the stimulation parameters.

19. The method of any one of Claims 1 to 18, wherein the stimulation is provided using first and second stimulation channels, the first stimulation channel comprising conductors electrically coupled to two spaced electrodes positioned on skin surfaces of an anterior lower pelvic region, the second stimulation channel comprising conductors electrically coupled to two spaced electrodes positioned on skin surfaces of a sacral region.

20. The method of Claim 19, wherein the electrodes are provided on a carrier configured to be secured to the lower pelvic or sacral region.

21. The method of Claim 20, wherein the carrier comprises a skin-compatible adhesive to secure the carrier to the lower pelvic or sacral region.

22. The method of Claim 20 or Claim 21, further comprising securing the carrier to the lower pelvic or sacral region so that the electrodes are substantially evenly laterally spaced relative to the spine.

23. The method of any one of Claims 1 to 22, wherein the stimulation comprises providing stimulation current of magnitude less than about 40 mA and greater than zero.

24. The method of any one of Claims 1 to 23, wherein the current is provided at a carrier frequency of between about 1 kHz and about 10 kHz, with a modulated frequency of about 20 to about 300 Hz.

25. The method of Claim 24, wherein the carrier frequency is about 4 kHz and the modulated frequency is about 80 Hz to 150 Hz.

26. The method of any one of claims 1 to 25, further comprising administering the TES to at least one lumbar and/or abdominal region simultaneously with administering the TES to the at least one lower pelvic and sacral region.

27. The method of claim 26, wherein the TES is administered to lower pelvic, sacral, lumbar and abdominal regions in a same treatment period.

28. The method of claim 27, wherein the administering TES includes administering the TES using four pairs of spaced electrodes positioned one in each of the lower pelvic, sacral, lumbar and abdominal regions.

29. A system for transcutaneously treating a waste evacuation dysfunction, comprising:

at least four electrodes comprising a first pair of electrodes positioned one on each lateral side of the spine or sacrum in the sacral region and a second pair of electrodes positioned laterally across the lower pelvic region;

a stimulation device configured to provide electrical stimulation signals to the at least four electrodes to perform the method of any one of Claims 1 to 28.

30. The system of Claim 29, wherein the stimulation device is configured to have a single set of stored stimulation settings that control the provision of the electrical stimulation signals.

31. The system of Claim 30, wherein the stimulation device is free of user-operable controls that would allow modification of the stimulation settings.

32. The system of Claim 30 or Claim 31, wherein the stimulation device comprises a port coupleable to an external computing device to allow modification of the stimulation settings.

33. The system of any one of Claims 29 to 32, wherein the stimulation device stores a limited set of selectable stimulation settings that control the provision of the electrical stimulation signals.

34. The system of any one of Claims 29 to 33, wherein the at least four electrodes comprise a first pair of electrodes positioned one on each side of the umbilicus and a

second pair of electrodes positioned in a para-spinal area on each side of lumbar vertebrae T9-10 to L2.

35. The system of any one of Claims 29 to 34, wherein the at least one electrode is carried on a carrier substrate adhered to the skin by a manually releasable adhesive.

36. The system of Claim 35, wherein the carrier substrate carries at least two electrodes spaced a substantially fixed distance apart across the substrate.

37. The system of any one of claims 29 to 34, further comprising a wearable structure to carry the stimulation device and to assist in positioning the at least one electrode on the skin.

38. The system of claim 37, wherein conductors electrically coupling the stimulation device to the at least one electrode are supported by the wearable structure.

39. The system of claim 38, wherein the conductors at least partially pass through the wearable structure.

40. The system of any one of claims 37 to 39, wherein the wearable structure comprises a belt.

41. The system of any one of claims 29 to 40, wherein the stimulation device comprises at least one accelerometer to detect at least one of movement and orientation of the stimulation device.

42. The system of any one of claims 29 to 41, wherein the stimulation device comprises means to assess patient compliance with the treatment regime based on information collected and stored on the stimulation device regarding patient usage of the stimulation device.

43. The system of any one of claims 29 to 42, wherein the stimulation device comprises a microcontroller having a timing function and configured to disallow further administration of electrical stimulation for a period following provision of electrical stimulation.

44. Use of the method of any one of Claims 1 to 28 or the system of any one of Claims 29 to 43 to treat at least one of: constipation; slow transit constipation; ileus; incontinence; and anorectal retention.

CLAIMS:

1. A system for transcutaneously treating a waste evacuation dysfunction, comprising:

at least four electrodes comprising a first pair of electrodes positioned one on each lateral side of the spine or sacrum in the sacral region and a second pair of electrodes positioned laterally across the lower pelvic region; and

a stimulation device configured to provide electrical stimulation signals to the at least four electrodes to treat a waste evacuation dysfunction by administering transcutaneous electrical stimulation (TES) to at least one lower pelvic region and at least one sacral region for at least one treatment period per day over a treatment term of at least one week, wherein the TES comprises interferential electrical stimulation.

2. The system of Claim 1, wherein the stimulation device is configured to have a single set of stored stimulation settings that control the provision of the electrical stimulation signals.

3. The system of Claim 2, wherein the stimulation device is free of user-operable controls that would allow modification of the stimulation settings.

4. The system of Claim 2 or Claim 3, wherein the stimulation device comprises a port coupleable to an external computing device to allow modification of the stimulation settings.

5. The system of any one of Claims 1 to 3, wherein the stimulation device stores a limited set of selectable stimulation settings that control the provision of the electrical stimulation signals.

6. The system of any one of Claims 1 to 5, wherein the at least four electrodes comprise a first pair of electrodes positioned one on each side of the umbilicus and a second pair of electrodes positioned in a para-spinal area on each side of lumbar vertebrae T9-10 to L2.

7. The system of any one of claims 1 to 6, further comprising a wearable structure to carry the stimulation device and to assist in positioning the at least four electrodes on the skin.

8. The system of claim 7, wherein conductors electrically coupling the stimulation device to the at least four electrodes are supported by the wearable structure.

9. The system of claim 7 or claim 8, wherein the wearable structure comprises a belt.

10. The system of any one of claims 1 to 9, wherein the stimulation device comprises at least one accelerometer to detect at least one of movement and orientation of the stimulation device.

11. The system of any one of claims 1 to 10, wherein the stimulation device comprises means to assess patient compliance with the treatment regime based on information collected and stored on the stimulation device regarding patient usage of the stimulation device.

12. The system of any one of claims 1 to 11, wherein the stimulation device comprises a microcontroller having a timing function and is configured to disallow further administration of electrical stimulation for a period following provision of electrical stimulation.

13. Use of the system of any one of Claims 1 to 12 to treat at least one of: constipation; slow transit constipation; irritable bowel syndrome; ileus; incontinence; and anorectal retention.