**‘Flow Chart of ODFS Set-up’ Please tell us what you think about it!**

We recognise most clinicians reading this do not use FES everyday of their working lives and many use it infrequently. Feedback has indicated that sometimes this leads to a lack of confidence tackling problems. We felt that one way to help may be to produce a relatively straightforward flowchart. We hope this may act as a ‘crib sheet’ of the commonest problems associated with ODFS set up/use and some ideas for solving them. It is produced as a simple reminder and so cannot be completely comprehensive. The instruction manual and course documents remain the main information source. We have put it on the web site www.salisburyfes.com in PDF format so that it can be easily printed off and I would appreciate any feedback regarding omissions, additions or if it has indeed been helpful.

# ODFS set up flow chart

**Subjective assessment as initial assessment form**

**Pacemaker** - liase with a cardiac technician
**Epilepsy** - monitor fit frequency to ensure stable
**Pregnancy** - not tested for safety

**Assess gait** identifying main problems e.g.
-general alignment
-hip/knee instability
-ankle - tonal changes/clonus
-compensations e.g. hip hitching, circumduction or vaulting on supporting leg

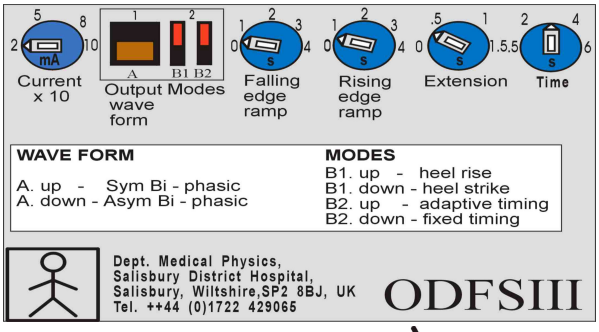


**Fig. 1**

**Set up** In sitting leg extended, try ODFS with standard internal set-up Fig. 1 and standard electrode position as shown Fig. 2. Gradually turn up output via pulse width dial.

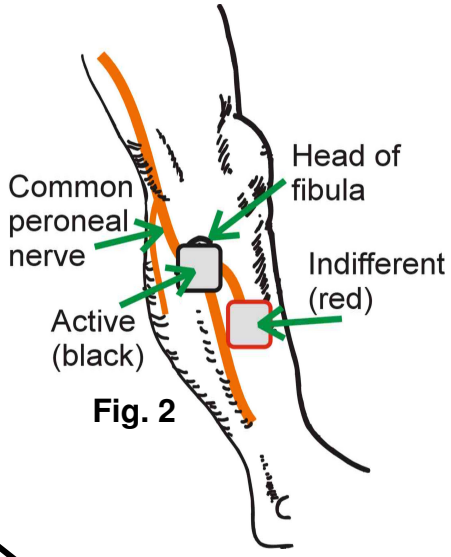


**Fig. 2**

**Is there contraction of ant tib/evertors producing dorsiflexion with some eversion?**

**no**

- alter current and output dial
- check electrode positions, electrode contact and battery
- too much eversion - alter fib head electrode >anteriorly
  - reverse polarity
  - change to biphasic
- not enough eversion - alter fib head electrode > posteriorly or > superiorly
- not enough dorsiflexion - adjust inactive red electrode
  - adjust active >anteriorly
  - reverse polarity
- increased calf tone, clonus, sensitivity - increase rising ramp, try blue electrodes, adjust electrode position, adjust intensity, change to biphasic or try period of stimulation with Microstim to get used to sensation.
- poor contraction - consider muscle fatigue as a cause - rest or try Microstim to increase muscle strength over time.

**yes**

Continue on next page

# ODFS set up flow chart - continued

**Good enough contraction to try in walking ?**

**No** → Return to previous page

**Yes**

**Assess in walking, good gait correction?** Use buzzer to check timing, with footswitch triggering

**No**

- weak contraction - increase output/current
- not coming on quick enough - decrease rising ramp
- not enough knee flexion - try pop fossa position
- knee hyperextension problematic - increase extension time
- foot flapping - increase extension time or adjust falling ramp
- too many problems present, do they need 2 channel?
- toe catching during swing, not enough dorsiflexion
  - coming on too slow? - reduce rising ramp (see next if patient high tone)
  - is there an increase in calf tone secondary to a stretch reflex because machine coming on too quick? - increase rising ramp
  - change triggering, try footswitch in other shoe or fixed timing
  - is limited ankle ROM limiting dorsiflexion? -try period of Microstim or stretches etc to increase ROM

**Assess in walking, good gait correction?**

**Yes**

**Instruct patient in use of machine and perform walking tests**

# Trouble shooting

**Problems with positioning**
- further education
- take a photo
- mark sites in pen
- are they using it often enough/daily? Or are they out of practice?
- are they appropriate for ODFS

**Problems with foot switch disconnecting**
- foot switch cover
- longer lead
- Tubigrip/Urisleeve
- tuck a little slack lead into top of sock or Tubigrip

**Problems with triggering**
- test/replace footswitch and lead
- unreliable heel strike try triggering from opposite heel
- ensure good connections
- try fixed timing

**Problems with variable output**
- worn connections or electrodes
- replace worn leads
- replace flat battery?

Look forward to your feedback

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