# **Unexplained Symptoms**

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#### Medically Unexplained Symptoms

- 30% of neurology out patients.
- 'Functional neurological symptoms'
- Every medical specialism has psychologically driven symptoms or exacerbation of symptoms.

#### Suffering and distress almost inevitable

- People are upset they have been called 'psychological' when they have symptoms.
  - The culture does not embrace such illness, the lack of clarity is undermining.
  - You provide confidence and validate, this is an essential part of your positive practice.

#### Assessment

As in first lecture, this is no different;

- Take the history (culture and narrative!!!!)
- Do the testing
- Consult the medical records
- Interview the relatives

#### But what causes FNS/MUS?

- No theory, less credibility, no NICE guideline
- Previously some have used the recovery model, accept the symptoms and live a full life if you can.
- Others have treated aiming to reduce symptoms with hypnosis to CBT.

### OT consensus practice points July 2020.

- Ask the person how and when their symptoms started
- Create a symptom list
- Clarify the persons understanding of their dx and if they agree with it.
  - Take a medical history
  - Take a detailed social history exploring rules and meaningful activities
  - Gain a picture of their 24 hour routine
  - Determine if they have care needs
- Undertake observation of daily activities and identify persons goals for treatment

# OT examples of clinical practice (from the consensus paper)

- Superimpose alternative voluntary rhythms on top of existing tremor and gradually slow all movement to rest
- Assist the person to relax the muscles in the limb to prevent contraction
- Address unhelpful pre jerk cognition's such as signs of anxiety frustration or effort
- Sensory grounding
- Encourage optimal postural alignment at rest and within function
- Engage the person in tasks that promote normal movement good alignment and even weight bearing
- Joint sessions with physio to complete tasks using the upper limbs

### Functional cognitive impairment for OT's

- Before advising practical cognitive strategies it is helpful to discuss the link between potential contributing factors and cognitive function
- \* Key to managing cognitive symptoms is to address the contributing factors such as fatigue pain anxiety when poor sleep either is part of OT or to encourage the person to seek help from their general practitioner.
- Dissociation a good place to start is to ask the person how they wish to be supported if they have a dissociative seizure during a therapy session. The group endorse gradual minimization of compensatory techniques such as use of sunglasses where indoors for photophobia or the use of headphones or ear plugs for auditory sensitivity.

## Physio clinical guidance (consensus paper in 2019)

- Details of symptom onset and progression comprehensive list of symptoms
  - **Social history**
  - 24 hour routine
  - Use of adaptive aids equipment and home modifications
  - Activity limitations and participation restrictions
  - Explored the patients understanding of the diagnosis

#### Case of tremor

- Practise strategies to control her tremor two or three times each day
- Try to stop hand clenching to support to suppress tremor
- Desensitise the right hand by great by generally increasing use of the hand
- Address the habitual non use of the right hand by incorporating the hand into some specific activities
- Address fatigue by reducing boom and bust activity patterns and start a gentle graded exercise and activity programme

#### Outcome measures for functional disorders

There is an international functional outcome measures group established.

2019 they published a consensus statement on the use of outcome measures in FND.

Agree that self report measures probably essential.

Issue about what outcome measures to use continues.

Edinburgh group key to this action also.

# Advised clinical practice from the Edinburgh group with OT and physiotherapy

Use the psychology P approach-

- Predisposing
- Perpetuating
- Precipitating

### Techniques for physiotherapy

- Gait retraining
- Use of distraction
- Managing fatigue and anxiety
- Use of a contract with the service user
- Section in paper on using outcome measures

Recent paper in JNNP regarding performance validity testing.

Edinburgh group recently wrote paper commenting that functional cognitive patients do not fail e.g. the TOMM anymore than other groups.

Paper might hint a questioning the usefulness of cognitive impairment in assessing FND.

### Neuropsychology

Management of patients with neurological medically unexplained symptoms within clinical services in NHS Scotland: The role of clinical neuropsychology (2013).

#### What therapies work

• A Cochrane Review (Martlew et al., 2009) on behavioural treatments for NEAD identified only three studies meeting their criteria, and stated that 'no conclusive results can be drawn' from these.

# Gaynor et al. (2009) also reviewed the literature and concluded that psychotherapeutic interventions are probably of benefit

Methodological issues making conclusion very difficult.

- Heterogeneity of studies: variation in study design, population sizes, control group used, duration of follow-up and standardisation of treatment protocol.
- Use of different outcome measures.

#### Matched care model advised where

- MDT large with some medical inputs (rehab medicine, neurology)
- Diagnostic interview needs carefully and expertly done.
- Different steps of treatment advised according to need from self help to specialist psychotherapy depending on mental health, history, readiness for therapy and so on.
- Core group meeting, assessment and management advised. MDT approach.

#### My last MUS/FNS case

- Female in 50's, paralysed lower limbs.
- History of MUS going back 20 years back pain, bowel disorder + episodic swallowing issues.
- New symptoms traumatic onset.
- Anger++ depression++ family impact severe.
- I proposed pre-therapy work up for depression, family work and engagement before physio and psych input to address paralysis.
- Neuropsychiatrist suggested 20 sessions CBT for the paralysis.

#### Prof Mark Edward's Baysian theory

Mental inflexibility

+

Abnormal illness beliefs

+

Erroneous interpretation of bodily functions.

Functional symptoms.

### Edwards; Functional Symptoms as 'Top Down Delusions'

- Theory involves that people are already in a stressed affective state.
  - Then there is a triggering event which changes functioning (pain, stiffness, tremor)
  - The interpretation of the event, in line with deep rooted expectations, makes the disorder.

#### The neuropsychology of FMS/MUS

- Self awareness is a key concept.
- Meta cognition; cognitive processes which monitor sensory, cognitive, motor and affective process.
- You can assess and treat MUS/FNS as a disorder of meta cognition (?).

# Making an accurate judgement about your motor and sensory function: faulty comparator.

- Something changes physically how does the mind interpret and manage the changes which might be something, or nothing?
  - Requires the integration of sensory, motor and cognitive processes.
  - There is a 'central' executive/ component which perhaps compares functions, predicts functions based on various inputs (a comparator).
- What might go wrong with this comparator?

# There are two extremes in making judgements about physical ability/change

You can over-estimate, somehow ignore the changes or loss of function and go as normal.

You can under-estimate what you can do, and focus on the lack of voluntary control, you can't move or voluntarily control.

#### The research

- The notion that there is a misperception of physical processes is accepted.
- We used to think people over attended to an automatic action, thus reducing its function by interfering with it.
- Advising 'distract' and believe you can do it! May not be that effective that often. Why?

#### Two extremes on the continuum

• People with MCA stroke often say they are symptom free (30-70% are the estimates for prevalence) when they are severely affected.

People with FNS can say they are unable to move when their CNS is intact.

### What sort of neuropsychological theory do we need?

- We know that right hemisphere has spatial 'maps' of the body, of places.
  - We know the normal brain updates these body and places maps in real time, as information changes.
  - We know that when there is a failure to 'update' that perception can use out of date info with which to predict and plan (leads to failures).

#### Going up a level

- How do maps update and work?
- How do one day you change your body image according with what you see in the mirror?
- You come to expect less agility, more pain?
- What are the mechanisms and processes?

#### Papers to read

 There are several papers proposing the neural basis for the system which informs the mind of what changes are happening physically, and what they mean.

Dorsal anterior cingulate brainstem ensemble as a reinforcement meta learner – Silvetti et al. 2018.

Motor and Somatosensory Conversion Disorder: A Functional Unawareness Syndrome? David L. Perez, M.D. Arthur J. Barsky, M.D. 2012

# Numan (2015); the idea of a comparator is accepted, here is another example.

- There is a comparator which regulates goal directed self action.
- His prefrontal hippocampal comparator plan + prefrontal cortex activity hippocampus where plan stored as memory including expected outcome. The hippocampus would store event that happened.

- The actual 'what happened' serves as a response intention outcome working memory comparator.
- After comparison a signal is sent back up to the pre frontal cortex to strengthen the plan, reformulate the plan, or re-use as is.

### Orfie et al; the explanation of anosognosia.

- Due to a deficit in the forward feeding mechanisms.
- Failure to compare planning and execution of movement.
- There is the feed forward to plan the movement, but a failure to feedback the info when the intention has occurred.
- You can plan to move and you register that; when no movement occur that is not registered.
- Prob is you do not know that you have no feedback.

Plan - act/move - feedback - plan - act/move - feedback.

#### Treatment and resolution of anosognosia.

- Anosognosia declines as real life trials and conscious awareness forces new info and inputs into feedback.
  - That's why physio with supported reflection is key; they consciously support attention to heed the reality of the motor and sensory situation.

#### Implications for treatment

- Correct individuals planning and expectations of movement and function.
- Reduce elaborations and catastrophising by rehearsal.
- Distract to free up attention and reduce inhibitory effects of over active planning stage of the motor sequence.
- Prime planning by recalling normal sensation and movements, which may be suppressed (Janet).
- Can use visualisation perhaps (JNNP paper).

#### Practical truth.

- Most people with MUS are very distressed and at their wits end.
- You must therefore also treat the distress, before getting to the mechanics of joint OT-Neuropsych, or joint physio – neuropsych, therapy (thinking better about moving).

# The Diagnostic Interview; Vital for Engagement.

- Before starting assessment and treatment; go through the history and formulation with the referring Neurologist/other medic.
- S/he should first explain to the patient about the unhelpful brain scans and medical tests.
- In the absence of other explanations, psychological factors have to be looked at.

- Cultural factors (expression whatian)
- Background factors (trauma, family disease)
- Personal style (flexible, accepting?)
- Current stresses (money, job, family)
- Resources for management of symptoms
- Collaborative planning for treatment.

#### Collaborative Goal Setting

- Let the patient say what they want to achieve.
- You make it reasonable, measurable, attainable (chunk sized bites).
- You take into account the environmental resources available.
- You take your neuropsychology assessment into account.