# Painless, progressive weakness – Could this be Motor Neurone Disease?

## 1. Does the patient have one or more of these symptoms?

### Bulbar features
- Dysarthria
  - Slurred or quiet speech often when tired
- Dysphagia
  - Liquids and/or solids
  - Excessive saliva
  - Choking sensation especially when lying flat
- Tongue fasciculations

### Limb features
- Focal weakness
- Falls/trips – from foot drop
- Loss of dexterity
- Muscle wasting
- Muscle twitching/ fasciculations
- Cramps
- No sensory features

### Respiratory features
- Hard to explain respiratory symptoms
- Shortness of breath on exertion
- Excessive daytime sleepiness
- Fatigue
- Early morning headache
- Orthopnoea

### Cognitive features (rare)
- Behavioural change
- Emotional lability (not related to dementia)
- Fronto-temporal dementia

## 2. Is there progression?

### Supporting factors
- Asymmetrical features
- Age – MND can present at any age
- Positive family history of MND or other neurodegenerative disease

### Factors NOT supportive of MND diagnosis
- Bladder / bowel involvement
- Prominent sensory symptoms
- Double vision / Ptosis
- Improving symptoms

**If yes to 1 and 2 query MND and refer to Neurology**

If you think it might be MND please state explicitly in the referral letter. Common causes of delay are initial referral to ENT or Orthopaedic services.

**Additional resources:**
MND Association downloads and publications at [www.mndassociation.org/gp](http://www.mndassociation.org/gp)
Limb features

70% of patients present with limb symptoms

- Focal weakness – painless with preserved sensation
- Distal weakness
  - Falls/trips – from foot drop
  - Loss of dexterity eg problems with zips or buttons
- Muscle wasting – hands and shoulders. Typically asymmetrical
- Muscle twitching/fasciculations
- Cramps

Bulbar features

25% of patients present with bulbar symptoms

- Dysarthria
  - Quiet, hoarse or altered speech
  - Slurring of speech often when tired
- Dysphagia – more often liquids first and later solids. Initially can be sensation of catching in throat or choking when drinking quickly.
- Excessive saliva
- Choking sensation when lying flat
- Weak cough – often not noticed by the patient

Painless progressive dysarthria – consider neurological referral rather than ENT.

Respiratory features

Respiratory problems are often a late feature of MND and an unusual presenting feature. Patients present with features of neuromuscular respiratory failure

- Shortness of breath on exertion
- Excessive daytime sleepiness
- Fatigue
- Early morning headache. Patients often describe a ‘muzziness’ in the morning, being slow to get going or as if hung over
- Un-refreshing sleep
- Orthopnoea
- Frequent unexplained chest infections
- Weak cough and sniff
- Nocturnal restlessness and/or sweating

Consider MND if investigations for breathlessness do not support a pulmonary or cardiac cause.

Cognitive features

Frank dementia at presentation is rare. Cognitive dysfunction is increasingly recognised, as evidenced by:

- Behavioural change such as apathy or lack of motivation
- Difficulty with complex tasks
- Lack of concentration
- Emotional lability (not related to dementia)

Ask specifically about a family history of these features.

Development group for this resource:
RCGP (L Davies, R Pizzaro-Duhart, I Rafi) MND Association (J Bedford, H Fairfield)
Neurology (P Callagher, C McDermott, K Morrison, R Orrell, A Radunovic, S Weatherby, A Wills) Palliative Medicine (I Baker)

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