

# 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

- 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
  - Positive family history of MND or other neurodegenerative disease
- Note that MND can present at any age.

### Factors NOT supportive of MND diagnosis

- Bladder/bowel involvement
- Prominent sensory symptoms
- Double vision/ptosis
- Improving symptoms

If the answer is YES to questions 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.

## 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

Consider referral to neurologist rather than ENT if painless, progressive dysarthria is present.

## 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 e.g. problems with zips or buttons
- Muscle wasting – hands and shoulders. Typically asymmetrical.
- Muscle twitching/fasciculations
- Cramps



## 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

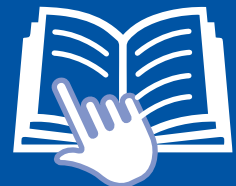
Frank dementia at presentation is rare. Cognitive dysfunction is increasingly recognised, as evidenced by:

- 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.

MND New Zealand resources for health professionals:

[www.mnda.org.nz](http://www.mnda.org.nz)  
or call: 09 624 2148



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