

Table 1: Various neurological diseases that could affect the cough reflex.

I) Neurological Conditions Associated with Increased Cough Reflex Sensitivity:

A) Cerebral Disorders

- 1- Psychogenic causes: Somatic or “tic” cough, Tourette's syndrome
- 2- Primary central reasons:
 - Medullary Lesion: Chiari I malformations
 - space-occupying lesion

B) Cerebellar Disorders

- 1- Cerebellar neurodegenerative disorders e.g., autosomal dominant cerebellar ataxia

C) Vagal neuropathy:

- 1- Viral infections,
- 2- Irritant exposure: allergic (e.g., aerosols, perfumes, odours), non-allergic irritants (e.g., changing temperature, drugs as Angiotensin-converting enzyme inhibitors)
- 3- Chronic conditions such as asthma
- 4- Vitamin B12 deficiency

II) Neurological Conditions Associated with Diminished Cough Reflex Sensitivity

A) Cerebral Disorders

- 1- Brain Hypoxia
- 2- Cerebrovascular Events
- 3- Dementia
- 4- Parkinson's disease
- 5- Drugs: e.g., antipsychotic drugs, anaesthetics

B) Amyotrophic Lateral Sclerosis and Multiple Sclerosis

C) Neuromuscular Diseases: e.g., myasthenia gravis

D) Peripheral Neuropathy

- 1- Hereditary Sensory Autonomic Neuropathies
- 2- Phrenic nerve palsy or injury
- 3- Diabetic autonomic neuropathy
- 4- Vitamin B12 and folate deficiency