

Example: Muscle Spasms Syndrome Management Protocol

Problem Or Syndrome

Intermittent muscle spasms

Causes To Consider (Remember to take into account the local epidemiology)

Tetanus (consider immunization status), reaction to phenothiazines, meningoencephalitis, subarachnoid hemorrhage, hypocalcemic tetany, alcohol withdrawal, seizure disorder.

History

History regarding tetanus vaccination, seizures, and penetrating trauma would be helpful, as would information regarding medications being taken and alcohol consumption.

Physical Examination

Attention to temperature, pulse, blood pressure, deep tendon reflexes. Examine for penetrating wound, other possible tetanus exposures. Chvostek's sign. Trousseau's sign. Anatomic progression of spasms.

Laboratory And Imaging (Minimal reliance on these)

If clinical suspicion permits:

Spinal tap (meningoencephalitis)

CBC (generalized infection/bleed)

BMP (electrolyte abnormalities, renal status)

CT/MRI (multiple sclerosis, if possible. Otherwise dx of elimination).

Definitive Diagnostic Criteria

Based on clinical history and observed course of illness

Treatment (Dosage information may be omitted)

Tetanus: Supportive treatment, wound care, tetanus toxoid vaccination, human tetanus immune globuli or tetanus antitoxin, sedatives, IV metronidazole to eliminate *Clostridium tetani*, propranolol or nifedipine.

Treat underlying causes of meningoencephalitis, hypocalcemia, seizures.

Treat alcohol withdrawal with sedation and maintenance of hydration.

Prevention

Counsel patient and family to stay up to date on tetanus vaccination every 10 years, counsel family on proper care of any wounds, counsel women of childbearing age and pregnant women on tetanus vaccination and clean deliveries if delivering at home.