Neuromuscular Disorders in Pregnancy

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KEYWORDS

• Neuromuscular diseases • Pregnancy • Neuropathy • Myopathy
• Muscular dystrophy • Myasthenia gravis

KEY POINTS

- Women can develop new neuromuscular disease during pregnancy or in the postpartum period. Pregnancy occurring in patients with neuromuscular disease should be considered in their evaluation, treatment, and prognosis.
- Neurologists can have a critical function in discussing selected pregnancies and facilitating appropriate genetic counseling and prenatal and postnatal care in women with known neuromuscular disease.
- Neurologic treatment choices in women of childbearing potential should include consideration of future pregnancy and the potential effects of therapy on the fetus.
- An individualized plan for pregnancy based on available disease-specific data with early interdisciplinary collaboration is recommended.

INTRODUCTION

Women may develop symptoms of acquired or manifest inherited neuromuscular disorders during pregnancy. For women with preexisting disease, many challenging questions arise for both the patient and the treating physicians surrounding pregnancy and delivery: Will the course of maternal disease change? Will treatment need to be adjusted, and, if so, how? What are the potential effects of therapy on the fetus? Will there be complications during labor and delivery? Are there additional implications for the fetus? The existing literature on the topic consists of isolated case reports and retrospective reviews. Most individual neurologists, including neuromuscular specialists, high-risk obstetricians, and anesthesiologists, have limited personal experience with pregnancy in any particular disorder. The most recent literature on neuromuscular disorders in pregnancy (**Box 1**) is reviewed.

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Box 1
Disorders reviewed in pregnancy

I. Root, plexus, peripheral nerve:

Median neuropathy at the wrist (carpal tunnel syndrome [CTS])

Lateral femoral cutaneous neuropathy (meralgia paresthetica)

Lumbar radiculopathy and plexopathy

Sciatic and common fibular (peroneal) neuropathy

Femoral neuropathy

Obturator neuropathy

Idiopathic facial nerve palsy (Bell's palsy)

Radial neuropathy

Intercostal neuralgia

II. Acquired disorders of peripheral nerves

Acute inflammatory demyelinating polyradiculoneuropathy (AIDP)

Chronic inflammatory demyelinating polyradiculoneuropathy (CIDP)

Multifocal motor neuropathy (MMN)

III. Acquired muscle disease

Polymyositis

Dermatomyositis

IV. Disorders of the neuromuscular junction

Myasthenia gravis

V. Inherited Neuropathies

Charcot-Marie-Tooth (CMT) disease

Hereditary neuropathy with liability to pressure palsies (HNPP)

Hereditary brachial plexus neuropathy (HBPN)

VI. Inherited muscle disorders

Facioscapulohumeral muscular dystrophy (FSHD)

Limb-girdle muscular dystrophies

Myotonic dystrophies

Nondystrophic myotonias and periodic paralysis

Congenital nemaline rod myopathy

Metabolic myopathy

Mitochondrial myopathy

VII. Motor neuron disease

Spinal muscular atrophies (SMA)

Amyotrophic lateral sclerosis (ALS)