3. **Botulism.**

Four forms of botulism are recognised:

- Infant botulism, from intestinal colonisation.
- Adult bowel botulism. This is similar to infant botulism. It occurs in patients with disrupted bowel flora from, for example, colitis.
- Food borne botulism, largely secondary to home canned foods.
- Wound botulism. This may be seen after trauma, surgery and sinusitis from intranasal cocaine abuse. However by far the commonest scenario is in drug abusers who subcutaneously inject (skin-poppers).

The toxin is one of the most potent known. It irreversibly blocks acetylcholine release at peripheral cholinergic terminals, i.e. the neuromuscular junction, postganglionic parasympathetic endings and peripheral ganglia. This results in a characteristic descending paralysis involving spinal, cranial and cholinergic nerves, with sparing of adrenergic and sensory nerves. Respiratory difficulties arise from diaphragmatic paralysis and airways obstruction. Recovery takes place when the axons sprout new terminals.

Diagnosis is made by detecting the toxin in serum. Treatment is supportive, together with antitoxin and surgical debridement of wounds where appropriate. With early detection and appropriate supportive care the long term prognosis is good.

**Further Reading**