DRUG PROFILE

PHARMACOTHERAPY FOR SPASTICITY IN CEREBRAL PALSY

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Abstract: Management of spasticity is integral to the therapy for children with cerebral palsy. The requirements of each child is assessed and therapy appropriate for the given child at each stage of development, is instituted. Some children with cerebral palsy may benefit from additional pharmacological treatment. Common medications include benzodiazepines, dantrolene sodium, baclofen, tizanidine, phenol and alcohol. In selected cases, local botulinum toxin A injection is used for reducing local spasticity to assist other modalities of therapy. Further studies in children and adolescents are needed to routinely recommend the anti-spasticity medications for children and adolescents with cerebral palsy. A review of the evidence for the use of each of these medications is detailed in this article.

Keywords: Cerebral palsy, Spasticity, BoNT-A, Baclofen.

Points to Remember

- Local injections of BoNT-A may be recommended for treating localized/segmental spasticity in the upper and lower extremities of children with CP. The effects are reversible and may be repeated every 3 to 6 months.
- The few months of reduction in local spasticity afforded by the BoNT-A injection could be utilised to improve strength of antagonist muscle groups, fitting orthotics and for casting, if necessary.
- Diazepam is probably effective for the short-term treatment of spasticity in children with CP.
- Tizanidine may be considered for spasticity treatment.
- There is insufficient evidence to support or refute the use of oral and intrathecal baclofen and dantrolene sodium for the treatment of spasticity in children with CP.

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