

Health Quality Ontario

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Lumbosacral Dorsal Rhizotomy for Spastic Cerebral Palsy: OHTAC Recommendation

ONTARIO HEALTH TECHNOLOGY ADVISORY COMMITTEE RECOMMENDATIONS

- The Ontario Health Technology Advisory Committee recommends that lumbosacral dorsal rhizotomy be publicly funded for children with spastic cerebral palsy who have been evaluated as appropriate candidates by a multi-disciplinary team
- The Ontario Health Technology Advisory Committee recommends that this procedure be provided in the context of programs that offer appropriate pre-procedural assessment and post-procedural rehabilitation

RATIONALE FOR THE RECOMMENDATIONS

The Ontario Health Technology Advisory Committee accepted the findings of the health technology assessment, which found that carefully selected patients reported clinically relevant improvements in motor function and functional independence with lumbosacral dorsal rhizotomy. OHTAC also felt that the total cost of this procedure was reasonable.

Members of the Ontario Health Technology Advisory Committee also noted that success of the surgery appeared to depend not only on careful selection of candidates by a multi-disciplinary team but also on physical rehabilitation after surgery.

Decision Determinants for Lumbar Sacral Dorsal Rhizotomy for Spastic Cerebral Palsy

Decision Criteria	Subcriteria	Decision Determinants Considerations
Overall clinical benefit How likely is the health technology/intervention to result in high, moderate, or low overall benefit?	Effectiveness How effective is the health technology/intervention likely to be (taking into account any variability)?	Dorsal rhizotomy reduces spasticity in selected patients and increases motor abilities and functional independence.
	Safety How safe is the health technology/intervention likely to be?	Incidence of major peri-operative complications is low.
	Burden of illness What is the likely size of the burden of illness pertaining to this health technology/intervention?	Spastic cerebral palsy is the most common cause of childhood physical disability and is a chronic life-long condition requiring family support
	Need How large is the need for this health technology/intervention?	There is no alternative treatment that provides permanent benefit.
Consistency with expected societal and ethical values^a How likely is adoption of the health technology/intervention to be congruent with societal and ethical values?	Societal values How likely is adoption of the health technology/intervention to be congruent with expected societal values?	Cerebral palsy has a substantial effect on quality of life with physical, emotional, financial, and caregiving implications.
	Ethical values How likely is adoption of the health technology/intervention to be congruent with expected ethical values?	Likely to be congruent.
Value for money How efficient is the health technology/intervention likely to be?	Economic evaluation How efficient is the health technology/intervention likely to be?	Value for money is unknown because the cost-effectiveness of lumbar sacral dorsal rhizotomy was not determined in this analysis
Feasibility of adoption into health system How feasible is it to adopt the health technology/intervention into the Ontario health care system?	Economic feasibility How economically feasible is the health technology/intervention?	Publicly funding dorsal rhizotomy and subsequent physical therapy could result in a net cost of \$1.3 million per year
	Organizational feasibility How organizationally feasible is it to implement the health technology/intervention?	Neurosurgeons in pediatric centres in Ontario are capable of and have performed dorsal rhizotomy. Multi-disciplinary pediatric teams are capable of assessing and following up children with spastic cerebral palsy. There are no special additional requirements for surgery, but outpatient physical rehabilitation needs are increased

^aThe anticipated or assumed common ethical and societal values held in regard to the target condition, target population, and/or treatment options. Unless there is evidence from scientific sources to corroborate the true nature of the ethical and societal values, the expected values are considered.

REFERENCES

Health Quality Ontario. Lumbosacral dorsal rhizotomy for spastic cerebral palsy: a health technology assessment. Ont Health Technol Assess Ser [Internet]. 2017 Jul;17(10):1-186. Available from: <http://www.hqontario.ca/evidence-to-improve-care/journal-ontario-health-technology-assessment-series>

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