

**IS INTRAVESICA ELECTRICAL
STIMULATION (IVES) EFFECTIVE IN TREATING
NEUROGENIC BLADDER IN CHILDREN WITH SPINA
BIFIDA: AN EVIDENCE-BASED CASE REPORT**

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Spina bifida (SB), a type of neural tube defect, is a common congenital abnormality that can result in neurogenic bladder (NB). [1] Current non-surgical treatments for lower motor neuron (LMN) type NB such as intermittent catheterization (IC) and voiding diary have extremely low compliance, especially in Indonesia. [2] Therefore, other treatment options are required to prevent long-term complications of LMN type NB such as permanent kidney damage. One alternative method includes intravesical electrical stimulation (IVES) that is known to increase detrusor muscle function. [3] This paper aims to explore the current evidence regarding the efficacy of IVES in treating LMN type NB in pediatric patients with SB. Available research articles were obtained from MEDLINE database using the keywords “child, spina bifida, neurogenic bladder, lower motor neuron, and intravesical electrical stimulation” along with their respective synonyms. Five relevant articles were found and critically appraised. [4-8] Four out of the five articles supported favourable outcome in the treatment of SB pediatric patients with LMN type NB, showing significant improvement in both motoric and sensory functions of the bladder after the completion of IVES regimen. IVES resulted in reduced dependence on IC and voiding diary. The articles also showed that IVES is safe and can even potentially reduce the associated risk of IC. All in all, IVES can be considered as an efficient alternative non-surgical treatment for children with LMN NB due to SB. However, studies regarding the use of IVES in LMN type NB are still limited and therefore more rigorous study should be conducted in the near future.

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