MYELOMENINGOCELE (MMC): CAN WE TRUST ONLY ON THE CLINICAL HISTORY OF CHILDREN WHO REFER GOOD SPHINCTERIAN CONTROL AND PRESERVED MICTURITION?

Hypothesis / aims of study
Children suffering from myelomeningocele have high incidence of bladder dysfunction secondary to the presence of neurogenic bladder. Only a small part of these children presents sphincterian control and preserved micturition. There are no data in the literature regarding the voiding pattern or the incidence of urologic complications in this group of patients. We evaluated the voiding pattern of children suffering from myelomeningocele with clinical history of "normal" voiding and preserved continence through urodynamic study.

Study design, materials and methods
We evaluated prospectively the correlation between the clinical history and voiding pattern through the urodynamic study of 500 children suffering from myelomeningocele in the period of 2 years. Within that group, we selected those with total continence and preserved micturition, in order to establish standard voiding and the overall incidence of urological complications.

Results
Among the patients, 23 were clinically continents and referred normal micturition (4.6%). The average age of the group was 8.4 years (5-26anos), 48% of them were female and 52% males. Of these, 90% had a high risk urodynamic pattern for urological complications (presence of bladder sphincter disinergy, bladder arephlexy with pressure greater than 40 cm H2O or high post voiding residual urine).

Interpretation of results
The overall incidence of complications was 56%. (17% had fever urinary tract infection, reflux and ultrasound dilation, 13% had reflux and ultrasound dilation, 17% only urinary tract infection ITU, 8% only reflux and 4% only dilatation)

Concluding message
The presence of normal voiding pattern does not preclude the possibility of serious voiding dysfunctions and can be associated with significant rate of complications in children suffering from MMC. The urodynamic evaluation is necessary, even in patients with apparently normal micturition.

Specify source of funding or grant  none
Is this a clinical trial? No
What were the subjects in the study? HUMAN
Was this study approved by an ethics committee? Yes
Specify Name of Ethics Committee  Ethical Committee of Associação de Assistência a Criança Deficiente - Aacd - Sao Paulo - Brazil
Was the Declaration of Helsinki followed? Yes
Was informed consent obtained from the patients? Yes