

# THESIS



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## DEFINITION OF THE PROJECT

- To objective the gait alterations throught the definition of a correlation coefficient in MMC patients according to the motor level compared with a group of normal patients and to measure the dispersion of the data in standard desviation.



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## DEFINITION OF THE PROBLEM

- Lack of objetive gait evaluation"s tool in MMC patients that give us information like Normalcy Index (Cerebral Palsy patients), about basal behavoir.



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## JUSTIFICATION

- Actually, we don't have objective evaluation's tool that allow to specify the dispersion of the MMC patients in relation with a normal patients.
- If we have this tool, we could specify the patient's basal condition and the repercussion of different treatments or to know the evolution on the time.




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## JUSTIFICATION

- In IRI, MMC patients are an important group, because they represent the third pathology, in frequency.
- AND...
- In the international literature, there are a few papers...




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## JUSTIFICATION

Número de artículos publicados en la literatura en relación a la Marcha v Mielomeningocele. Últimos 2003 - 2007

Key words: gait, mielomeningocele

2003	2004	2005	2006	2007
4	6	4	5	6

Key words: gait, spina bifida

2003	2004	2005	2006	2007
0	8	3	4	4




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## OBJECTIVE

- To create an instrument of evaluation with kinematic parameters based in the information obtain in the gait lab of MMC patients and a group of normal children.




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## HYPOTHESIS

- The behavior all MMC patients is different to the normal patients.
- The patients with lumbar level are more move away to the normal pattern than the sacral level.
- Each motor level has its tipical behavior and different to another levels. Therefore, this situation permits to stablsh different profiles to each levels.




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## LIMITATIONS

- Difficulty to precise exactly the motor level, because asimetry, heterogeneous and "salpicado".
- However, our previus experience has show us that we can wait a behavior very similar in each level.




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## LIMITATIONS

- Our observation about differences among evaluation scales in the literature and the difficulties to compare the results.
- Our institution has create an own scale to clasify the functional motor level. This scale will be use in this scientific research to standardize our sample.




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## LIMITATIONS

- Probable interferences of the orthopedic surgeries. However, the experience say that the orthopedic surgeries don't significantly change the behavior pattern.




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## LIMITATIONS

- Difficulty in the patients recruit to have the inclusion criteria to the scientific research. However, our institution has a great number of patients with this pathology to improve the recruit
- **However, we can establish a curve that show us the kinematic behavior our patients, in relation to your motor level.**




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## REFERENCE

- Many papers as concern to scientific research with MMC patients will be considere like references, since 10 years ago.



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