



قسم الأطفال

البحث الثاني

<u>عنوان البحث :</u>

# Diagnostic approach of floppy infants: a study in Fayoum University Hospital, Egypt

Middle East Journal of Medical Genetics. 2017 6:70-74

<u>مكان وتاريخ النشر:</u>

# **Background**

Floppy infants represent a large proportion of patients attending the neurology clinic in Fayoum University Hospital. Neuromuscular disorders represent a common cause of floppiness. Electromyography (EMG) is an easy and cheap tool used for the diagnosis of these infants.

### Patients and methods

The study classified cases with neuromuscular disorders using different and new diagnostic modalities. It included 42 floppy infants who were subjected to a full assessment of history, anthropometric measurements, laboratory investigations (serum creatine kinase and lactate), and EMG. Echocardiography, muscle and liver biopsy, and molecular study for bi-allelic deletion of exon 7 of the SMN1 gene were carried out when indicated.

### Results

Floppy infants were classified as follows: spinal muscle atrophy (SMA): 23 (55%) cases, congenital myopathies: 11 (26%) cases, peripheral axonal neuropathy: two (5%) cases, muscle eye brain disease: one (2.25%) case, glycogen storage type 2 (Pompe disease): one (2.25%) case, arthrogryposis multiplex congenita: one (2.25%) case, and undiagnosed etiology: three (7.25%) cases.

### Conclusion

SMA represents the most common neuromuscular cause of floppy infants in this study, followed by congenital myopathy. EMG is considered a cheap diagnostic tool and provides a good clue for the next step for diagnosis. Further, detection of other mutations involved in SMA is crucial for proper genetic counseling and early prenatal detection.