The purpose of study was to investigate the response of skeletal muscles to interferential therapy in children with hemophilia. Subjects: thirty hemophilic children were assigned randomly into two groups of equal numbers, control and study groups, 15 patients each. The control group received traditional treatment program (ultrasound, stretching and strengthening exercises) for one hour, while the study group received interferential therapy in addition to the same program given to the control group. Biodex isokinetic dynamometer was used for evaluation, conducted before and after three successive months of treatment. Results: The results of this study revealed significant improvement when comparing pre and post treatment results in each group. Also significant improvement was observed in favor of the study group when comparing the post treatment results of the two groups. Conclusion: On basis of the present results, it can be concluded that interferential therapy can be used as an effective additional tool to the physical therapy program in treatment of chronic synovitis of hemophilic children.

**Key words**

1. Interferential therapy.
2. Hemophilia.
3. chronic synovitis.
4. skeletal muscles.
5. children
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Title: Effect of art therapy on some selected functional parameters in mentally retarded children.

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Degree: Doctoral.
Year: 2013.

Abstract:
Purpose: This study was designed to investigate the effect of art therapy on some selected functional parameters, such as fine motor, physical, psychosocial and school functioning parameters of the mentally retarded children. Subjects and methods: Thirty children (15 boys and 15 girls), from 8 to 14 years old were participated in this study. They were classified into three groups of equal number (A,B and C). Children in group (A) received art therapy program and occupational therapy program, while children in group (B) received the same art therapy program only and children in group (C) received the occupational therapy program only. All children were assessed by using Peabody Developmental Motor Scale (PDMS) and Pediatric Quality of Life Inventory Scale (PedsQL) before starting the treatment and after six months of treatment. Results: The study revealed a significant improvement in all measuring variables in all groups, but there was a significant difference between three groups in the emotional and psychosocial parameters in favor to group A and B that received art therapy program. Also, significant difference was observed between three groups in fine motor skills and physical parameter in favor to group A and C that received occupational therapy program. Finally, highest improvement in all measuring parameters was noted in group A than either group B or C. Conclusion: It is possible to conclude that art therapy can promote and improve fine motor skills and other selected functional parameters such as emotional, social and school functioning in mentally retarded children.

Key words:
1. Art therapy.
2. Functional parameters.
3. Mental retardation.

Arabic Title Page: تأثير العلاج بالفن التشكيلي على تحسين بعض المعايير الوظيفية المختارة لدى أطفال الأعاقة الذهنية.

Library register number: 3175-3176.
Background: The purpose of this study was to investigate the effect of balance training on kinematic gait parameters in children with post traumatic brain injury. Subjects: thirty post traumatic brain injured children were selected and assigned randomly into two groups of equal number, control and study groups, each contained 15 Patients. The control group treated by a selected therapeutic exercise program (gait training activities, stretching exercises and strengthening exercises), while children in the study group treated by balance training program in addition to the same program given to the control group. Balance parameters was assessed by Biodex stability system. Gait parameters were assessed by Biodex gait trainer 2, before and after three successive months of treatment. Results: The results revealed a significant improvement in the two groups when comparing their pre and post treatment results. Significant improvement was observed in favor of the study group when comparing the post treatment results of the two groups. Conclusion: On basis of the present data, it is possible to conclude that, balance training program is a beneficial modality that may be used to improve postural control and kinematic gait parameters with post traumatic brain injured children.

Key words: 1. post traumatic brain injury.  
2. kinematic gait parameters. 
3. postural control. 
4. balance.

Arabic Title Page: أثر تدريب الاتزان على محددات المشي الكيناميكية لدى الأطفال ما بعد إصابة المخ.

Library register number: 3447-3448.