The role of physical therapy in the WFH Twinning program



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Introduction

In low income countries resources of clotting factors are limited, and prophylaxis is very uncommon. More over distances are long and transport to a hospital is often problematic. Clotting factor is mostly given for severe joint bleeds only, and paediatricians are not aware that additional measures and rehabilitation are part of treatment. Haemophilia is a haematological disorder with an orthopaedic outcome. For these reasons disability in young haemophilia patients is seen (to) frequently.

Prevention, normal motor development, functional recovery after every bleed as well as additional measures are of utmost importance to keep a patient physically functioning and participating in a society where social support is scarce. Compared to clotting factor concentrates Physiotherapy is cheap, however coaching by a physical therapist of the haemophilia treatment centre is not often realized. In a twinning program education of physical therapist, bedside teaching and patient evaluation is possible, but only once a year. Therefor instruction of patients always is based on functional goals ("milestones").

Case history: Mario (18 years) has severe haemophilia A and is only treated on demand for major bleeds. Due to repeated bleeds he had is not able to walk due to haemophilic arthropathy resulting in fixed flexion contractures of both knees and equines position of the right ankle, which were the results of many untreated bleeds. At first examination he used a wheel chair permanently, and was sometimes carried by his father.

He was convinced and very motivated to walk again

Pictures of progress based on functional milestones

The first year: He started using axillary crutches and was instructed by the visiting physical therapist. Axillary crutches make it possible to walk in a somewhat "sitting" position.

Second year the crutches were elevated, allowing him to walk with more extended knees so in a more upright position







2011 year on axillary crutches

Conclusion

By teaching a patient a home training program based on functional milestones once a year, it is possible to have an own income, good quality of life and built an own family.

The third year he could climb the stairs, walk without aids and started preparing and selling cookies

After 4 years he could make his own living, had his own house and got married. During this period he had no severe bleeds and whenever there was a bleed he knew he should not wait to have it treated.



2012 walking without aids



2013 baking cookies making his own income

Recommendations

Active functional physical therapy should be part of a Twinning program







