Cohort study and predictive factors of functional outcome in amputated patients 80 or more years old

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Keywords: Elderly; Amputated; Outcome; Functional; Walk; Factors; Geriatrics; Rehabilitation

Objective. – Isolate medical and social predictors of functional outcome in elderly amputated patients 80 or more years old.

Population. – One hundred and thirty patients, aged 80 or more, affected by a minor amputation (AM), transtibial (ATT) or transfemoral (ATF) hospitalized from 2007 till 2013.

Method. – Retrospective qualitative and quantitative analysis of medical and social files.

Results. – Thirty-five % ATF, 37% ATT; 2% AM, 94% AT, 90% ATT, 58% AM followed prosthetic rehabilitation. Seventy-six % AT, 88% ATT and 75% AM walked again. Fifty-one % AM, 60% ATT put on by themselves. Forty-nine % AM, 58% ATT and 59% AM have a walking distance upper to 100 m. Thirty-seven % AT, 37% ATT and 36% AM returned at home. Nine % AT, 15% ATT and 17% AM were hospitalized again.

Conclusion. – Majority of elderly amputated patients put on by themselves, walk upper than 100 meters. One third of them return to home. A secondary analysis of the data (open/close surgery, medicinal treatments, additional surgery, period between surgery/prosthesis rehabilitation, previous falls, previous speed, nutritional assessment…) will look for geriatrics predictive factors of functional outcome.

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Detection of progressive scoliosis with 3D-surface topography (Biomod-L®): A prospective study on 100 patients

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Keywords: Surface topography; Spine; Scoliosis; Radioprotection

Objective. – To study sensibility and specificity of Biomod-L® of 3D-surface topography the back, in order to detect Cobb angle progression during scoliosis follow-up.

Method. – Non-interventional prospective study on 100 consecutive patients. Three progression thresholds of 3°, 5° and 10° of Cobb angle were defined. Biomod-L® were performed in standard erect position and “rolled up shoulders” position. Parameters were humps with a 2° progression threshold, and spinous line curvatures with a 10° progression threshold. Positive and negative predictive values, sensibility and specificity of surface parameters for predicting worsening of Cobb angles, with 3°, 5° and 10° progression thresholds, were calculated.

Results. – Combining an increase of more than 2° “of one hump at least OR of the humps sum in either one of the two measurement positions” detected 3°, 5° and 10° of Cobb angle worsening with sensibilities of 86%, 86% and 100% and specificities of 58%, 50% and 43%, respectively.

Conclusion. – Using topographic parameters as trigger of radiographs may reduce the number of X-rays controls from 40% to 56% in scoliosis follow-up.

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Mirroring therapy in the treatment of the phantom limb pain in amputees

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Background. – Phantom limb pain (PLP) is a major problem after limb amputation. Even though mirror therapy (MT) seems to be an interesting therapeutic option, its application in clinical practice remains to be clarified.

Objective. – To conduct a literature review about MT treatment in amputees (lower or upper limb) suffering from PLP.

Method. – We searched following keywords, phantom limb/mirror therapy or phantom limb/mirror visual feedback, in the PUBMED database. Nineteen studies dealing with mirror therapy in limb amputees (lower or upper limb) have been selected, read and analysed.

Results. – Our review is the 7th one about MT, and the second devoted to MT’s application in amputated persons. Among the 4 randomized controlled trials, 2 showed the effectiveness of MT treatment on PLP and 2 showed an improvement in the phantom limb movement (PLM). Other papers were 5 prospective studies adding up 64 patients and 10 case study papers adding up 33 patients. All of these studies reported the effectiveness of the MT in PLP.