

**Method:** We independently translated SRS 22 from English to Arabic questioner which were filled out by 36 patients.

All of them were cases of idiopathic scoliosis treated by surgery and instrumentation in Palestine from 2004-2007, with a mean follow up time of 1.5 years, with a minimum post-op period of 10 months. Mean age at this of surgery was 13 years old.

Radiographic examination included pre and post op. a Cobb angle, and the curves were classified as thoracic "26" lumbar "1" thoracic and lumbar "9".

**Results:** The questionnaire results were used to divide patients into 2 groups for each domain one for those who had a score of 4 and above (satisfied), the other for those who had a score of below 4 (unsatisfied).

Comparison between SRS 22 and radiographic results revealed positive correlation between self image, pain and mental health domains with the Cobb angle correction. On the other hand, no correlation was detected with function domain.

SRS 22 score	Mean Cobb angle post-operatively			
	<i>Self image</i>	<i>Pain</i>	<i>Mental health</i>	<i>Function</i>
<i>4 and above</i>	29°	32°	29°	33°
<i>Below 4</i>	39°	41°	39°	28°

**Conclusion:** What can be concluded from the data above is that the Arabic version of SRS 22 is a reliable instrument for measuring idiopathic scoliosis patients satisfaction with regard to the amount of correction post operatively in Palestine.

Scoliotic deformity should be substantially reduced by the surgical treatment to improve satisfaction rates according to the SRS 22 outcome.

### ***3) The Value of the Salter Osteotomy as a Routine Adjunct to Open Reduction of Developmental Dislocation of the Hip***

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**Introduction:** Despite the widespread use of screening programs to detect hip dysplasia in the newborn, children are still seen later in childhood with established dislocation. We retrospectively evaluated the radiographs of 59 cases of open reduction, with and without Salter osteotomy, both to evaluate the long-term effects of the Salter osteotomy on the quality of the hips and to decide if it should be a routine adjunct to open reduction. We also compared the hips with the Salter osteotomy done at the time of primary open reduction with those in which it was done later as a secondary procedure to determine if the procedure actually affects the development and modeling of the acetabulum. This series is distinguished by the long follow-up to, or almost to, skeletal maturity.

**Methods:** We reviewed the records and x-rays of sixty two (59) hips with DDH with no associated congenital or neuromuscular disorders who underwent open reduction as primary surgical treatment after the age of 1.5 years. All patients had their primary treatment in our hospital between 1975 and 1992 with a minimum follow-up of 9.6 years. There were 36 hips that had only open reduction as a primary procedure (Group R) and 26 hips that also had a Salter osteotomy (Group RS). In Group R there were 4 hips that had a subsequent secondary Salter osteotomy (Group R/S, the slash representing an interval of time).



We evaluated radiographs done preoperatively, postoperatively and at the time of the most recent follow up visit. We measured the acetabular index (AI), center edge (CE) angles, and the sphericity of the femoral head by the Mose technique. The hips were assessed for avascular necrosis by the method of Kalamchi and MacEwen and the overall outcome graded according to Severin.

**Results:** For Group R and Group RS, the mean ages at first operation were 4.9 years and 3.6 years respectively, and the mean radiological follow-ups were 11.3 years and 9.6 years. The pre-operative acetabular indices were 35.0° and 35.2° indicating that the severities of dysplasia were similar. 57.5% of Group R went on to have subsequent surgery compared to 23% of group RS. In groups R & RS respectively, assessment of outcome at final follow-up revealed CE angles of 26.5° and 30.1°, mean Mose circle indices of 3.8° and 2.4°, avascular necrosis presence in 57.5% and 31%, and good (grades 1 & 2) Severin results in 63% and 81%.

In groups R/S & RS the pre-operative acetabular indices were 31° and 37.6° indicating that the hips in group R/S were less dysplastic to start. Assessment of outcome at final follow-up revealed, in groups R/S and RS respectively, CE angles of 34.0° and 29.8°, mean Mose circle indices of 2.5° and 2.1°, avascular necrosis presence in 50% and 31%, and good (grades 1 & 2) Severin results in 75% and 85%.

**Conclusions:** Our results show that routinely performing a Salter osteotomy at the time of primary open reduction of the hip improves the long-term outcome of the hip. The femoral head is a better shape as evaluated by both the Mose and Severin methods and the acetabulum provides better coverage as indicated by the center-edge angle. In addition, fewer subsequent surgical procedures were required and evidence of avascular necrosis was less.

It might be argued that the only effect of the Salter osteotomy is a fixed geometrical change, that it should not matter in the long run whether that change is introduced early or later, and that the Salter osteotomy could be omitted from the primary procedure and performed later only for persistent dysplasia. Having only 4 cases in our R/S group prevents us from reaching reliable conclusions but the fact that group RS was more dysplastic at the start, and arguably better at the end suggests that there is an advantage in doing the Salter osteotomy early.

**Significance:** These results should cause those surgeons who do not routinely include the Salter osteotomy in the primary surgical treatment of the dislocated hip to reconsider their strategy in terms of including the Salter osteotomy in their primary surgical treatment of the dislocated hip over 1.5 years of age.

#### ***4) Treatment of Subtrochanteric Fractures in Adolescent Patients with Reconstructive TAN Nail***

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**Introduction:** It has now been well established through more than one study that the management of fractures of femur in pediatrics of the adolescent age group are best managed by reduction and secure internal fixation rather than non surgical conservative sort of treatment . This results in better outcomes including quicker healing and the less eventful complication of avascular necrosis (AVN) of the head of femur and length discrepancy , earlier ambulation and weight bearing, better psychosocial results and shortened hospital stay. (5,6,14,18,19,22,24,25) .

It has also been recognized that subtrochanteric fractures of the femur implement more challenges in management as they hold limited ability to compensate for malalignment with the presence of deforming muscle forces that render maintenance of reduction difficult. In addition, there is a lack of agreement regarding definition of the fractures . A proposed definition by Mathew and Jeffrey, after

