

**POTSI index:** Posterior Trunk Symmetry Index, parameter of assessment of the surface trunk deformity in scoliosis, described by Suzuki et al. (1, 2), is a key parameter to assess deformity in the coronal plane. Eight specific points at the surface of the patient's back are required. POTSI is relatively simple to measure, even on regular photography of the back. Ideal POTSI is zero, meaning full symmetry of the back surface. Normal values were reported to be below 27 (2,3). POTSI is very sensitive in revealing any frontal plane asymmetry.

$$\text{POTSI} = \text{FAI-C7} + \text{FAI-A} + \text{FAI-T} + \text{HDI-S} + \text{HDI-A} + \text{HDI-T}$$

FAI-C7 - Frontal Asymmetry Index C7

$$\text{FAI-C7} = \frac{i}{c+d} \times 100$$

FAI-A – Frontal Asymmetry Index Axillar

$$\text{FAI-A} = \frac{|c-d|}{c+d} \times 100$$

FAI-T - Frontal Asymmetry Index Trunk

$$\text{FAI-T} = \frac{|a-b|}{a+b} \times 100$$

HDI-S – Height Difference Index Shoulder

$$\text{HDI-S} = \frac{h}{e} \times 100$$

HDI-A - Height Difference Index Axillar

$$\text{HDI-A} = \frac{g}{e} \times 100$$

HDI-T – Height Difference Index Trunk

$$\text{HDI-T} = \frac{f}{e} \times 100$$

References:

1. Suzuki N, Inami K, Ono T, Kohno K, Asher MA. Analysis of posterior trunk symmetry index (POTSI) in scoliosis, part 1. Stud Health Technol Inform 1999, 59:81-84.
2. Inami K, Suzuki N, Ono T, Yamashita Y, Kohno K, Morisue H. Analysis of posterior trunk symmetry index (POTSI) in scoliosis, part 2. Stud Health Technol Inform 1999; 59: 85-88.
3. Minguez M, Buendia M, Cibrian R, Salvador R, Laguia M, Martin A, Gomar F. Quantifier variables of the back surface deformity obtained with a noninvasive structured light method:evaluation of their usefulness in idiopathic scoliosis diagnosis. Eur Spine J 2007, 16: 73-82.