

Objective Pain Scale (OPS) of Hanallah et al for Postoperative Pain Assessment

Overview: Hannallah et al developed the Objective Pain Scale (OPS) to monitor pain in children after surgery. The authors are from the Children's National Medical Center in Washington DC.

Patient selection: 8 months to 13 years

Data requirements: average of the 3 previous systolic blood pressures

Parameters:

(1) systolic blood pressure

(2) crying

(3) movement

(4) agitation (confused excited)

(5) complains of pain (may not be possible in younger children)

Parameter	Finding	Points
systolic blood pressure	increase < 20% of preoperative blood pressure	0
	increase 20-30% of preoperative blood pressure	1
	increase > 30% of preoperative blood pressure	2
crying	not crying	0
	responds to age appropriate nurturing (tender loving care)	1
	does not respond to nurturing	2
movements	no movements relaxed	0
	restless moving about in bed constantly	1
	thrashing (moving wildly)	2
	rigid (stiff)	2
agitation	asleep or calm	0
	can be comforted to lessen the agitation (mild)	1
	cannot be comforted (hysterical)	2

complains of pain	asleep	0
	states no pain	0
	cannot localize	1
	localizes pain	2

total score = SUM(points for all scorable parameters)

Interpretation:

- minimum score: 0
- maximum score: 10
- maximum score if too young to complain of pain: 8
- The higher the score the greater the degree of pain.

Limitations:

- Systolic blood pressure could be affected by preoperative or postoperative hypotension.

References:

Broadman LM Rice LJ Hannallah RS. Comparison of physiological and a visual analogue pain scale in children. *Canadian J Anaesthes*. 1988; 35 (Supplement): S137-S138.

Hannallah R Broadman L et al. Comparison of caudal and ilioinguinal/iliohypogastric nerve blocks for control of post-orchiopexy pain in pediatric ambulatory surgery. *Anesthesiol*. 1987; 66: 832-834.

Norden J Hanallah R et al. Reliability of an objective pain scale in children. *J Pain and Symptom Management*. 1991; 6: 196.

West N Oakes L e al. Measuring pain in pediatric oncology ICU patients. *J Pediatric Oncology Nursing*. 1994; 11 (2 April): 64-68 (Figure 2 page 66).