

Best Practice Guidelines

Surgical Site Infection (SSI) Prevention with Surgical Treatment of Early Onset Scoliosis

Consensus Recommendations		% Consensus		
		TOTAL	Strongly Agree	Agree
Preoperative	Patients should receive a preoperative Patient Education Sheet before an insertion procedure.	100%	57%	43%
Preoperative	Patients should have a pulmonary work-up/evaluation if there is a history of respiratory problems (i.e. pneumonia, asthma, tracheostomy, etc.).	100%	50%	50%
Preoperative	Patients with neuromuscular disease should have a preoperative nutritional assessment before an insertion procedure.	86%	36%	50%
Preoperative	Patients should have a chlorhexidine skin wash at home the night before an insertion procedure.	96%	57%	39%
Preoperative	Patients should have a chlorhexidine skin wash at home the night before a lengthening procedure.	90%	70%	20%
Preoperative	Patients with myelodysplasia should have urine cultures obtained and treated if positive before an insertion procedure.	100%	65%	35%
Intraoperative	Operating room access should be limited during scoliosis surgery whenever practical.	93%	36%	57%
Intraoperative	Prep should be wide enough to place chest tube within the surgical field.	100%	71%	29%
Intraoperative	Prep area should allow access to all previous implants.	100%	73%	27%
Intraoperative	Adherence to perioperative antimicrobial regimens should be monitored (i.e. agent, timing, dosing, redosing, cessation).	100%	29%	71%
Intraoperative	All patients should receive perioperative intravenous cefazolin (or appropriate coverage in setting of penicillin allergy) before an insertion or lengthening procedure.	100%	43%	57%
Intraoperative	Patients with neuromuscular disease (including myelodysplasia) should receive perioperative intravenous prophylaxis for gram-negative bacilli for an insertion procedure.	92%	21%	71%
Intraoperative	If removing hair before an insertion or a lengthening procedure, clipping is preferred to shaving.	93%	36%	57%
Intraoperative	When compared with other skin preparations, chlorhexidine-based perioperative skin preparation is the preferred regimen for an insertion procedure.	93%	36%	57%
Intraoperative	When compared with other skin preparations, chlorhexidine-based perioperative skin preparation is the preferred regimen for a lengthening procedure.	86%	29%	57%
Intraoperative	Soft tissue handling and incision planning is important in preventing postoperative infections for insertion and lengthening procedures.	100%	36%	64%
Intraoperative	The fascia/muscle incision should not be made directly over the planned implant.	86%	36%	50%
Intraoperative	Patients should have intraoperative wound irrigation.	100%	57%	43%
Intraoperative	Vancomycin powder should be used in the bone graft and/or the surgical site for insertion procedures	100%	79%	21%
Postoperative	Postoperative dressing changes should be minimized before discharge to the extent possible for insertion and lengthening procedures.	86%	72%	14%
Postoperative	Impervious dressings are preferred postoperatively for insertion and lengthening procedures.	92%	64%	28%
Postoperative	Antibiotics should not be continued beyond 24 hrs. regardless of diagnosis	80%	42%	38%

Statements with white background reached consensus after round 1.

Those with shaded backgrounds reached consensus on round 2.

Reference:

Glantzbecker MP, St Hilaire TA, Pawelek JB, Thompson GH, Vitale MG; Children's Spine Study Group; Growing Spine Study Group. Best practice guidelines for surgical site infection prevention with surgical treatment of early onset scoliosis. *J Pediatr Orthop.* 2019; 39(8):e602-e607.

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