

Form Title ERAS Liver Surgery, Adult – Inpatient Post-Op Order Set

Form Number 21061

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Alberta Health Services

ERAS Liver Surgery, Adult – Inpatient Post-Op Order Set

Last Name	
First Name	
PHN	MRN
Birthdate (dd-Mon-yyyy)	Physician

Select orders by placing a (\checkmark) in the associated box

For more information, see Clinical Knowledge Topic ERAS Liver Surgery, Adult - Inpatient

Admit, Transfer, Discharge

Anticipated Date of Discharge (dd-Mon-yyyy):

Patient Care

Discuss Goals of Care with patient/Alternate Decision-Maker and update Goals of Care Designation, if applicable (#103547).

☑ Sequential compression device (SCD): discontinue when ambulating well

Monitoring

☑ Vital Signs: assess as per local institutional practices

- Dioid Monitoring: monitor as per local institutional practices
- ☑ Pain Score and Nausea Score: assess at least every 4 hours x 3 days and then every 8 hours
- □ Blood Glucose Monitoring Point of Care Testing (POCT): BID x 48 hours. Notify most responsible health practitioner if blood glucose is less than 4 mmol/L or greater than 12 mmol/L

Other Monitoring:

Activity

☑ Activity as tolerated

- POD 0: stand at bedside, up in chair, walk to doorway and back; activity goal is 2 hours
- POD 1: up in chair each meal, ambulate at least 3 times daily; activity goal is 4 hours
- POD 2 until discharge: up in chair each meal, ambulate at least 3 times daily; activity goal is 6 hours

I Notify physiotherapist if pre-operative mobility concerns or if patient requires more than one-person assist

Intake and Output

☑ Intake and Output: assess every 8 hours x 4 days, include strict oral intake

☑ Indwelling Urinary Catheter: remove on POD 1 in AM

☑ In and Out Urinary Catheter: insert PRN for urinary retention once indwelling urinary catheter removed
 ☑ Weight: assess daily x 3 days, start on POD 1

□ Other Intake and Output:_

Diet/Nutrition

☑ Clinical Communication: offer patient oral fluids; intake goal 500 mL on POD 0

☑ Post-Surgical Transition Diet: start on POD 0

☑ Regular Diet: start on POD 1

□ Regular Diabetic - Adult Diet: start on POD 1

□ Other Diet/Nutrition:

Prescriber \$	Signature
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Date (dd-Mon-yyyy)

Time (hh mm)



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Diet/Nutrition, continued

Protein/Calorie Dense Oral Nutritional Supplements

Appropriate when patient is on any type of oral diet including Gluten-free and Diabetic - Adult. Suitable for lactose intolerance but NOT appropriate for dairy allergy. Achieve a supplement intake of 300 kcal/day on POD 0 and 600 kcal/day on POD 1 until discharge.

☑ Ensure Protein Max: 90 mL PO 3 times daily, start on POD 0 and then 90 mL PO 5 times daily, start on POD 1 until discharge

Wound Care

☑ Surgical Incisions: assess every 8 hours and PRN

□ Wound Dressing Instructions:

Respiratory Care

☑ Incentive Spirometry: perform every 1 hour while awake

☑ Oxygen Therapy: titrate to saturation, maintain SpO₂ greater than 92%

☑ Head of Bed: elevate to at least 30 degrees while patient on opioids or epidural

□ Other Respiratory Care:

Laboratory Investigations

Complete Blood Count (CBC) with differential, start on POD 1 in AM and repeat daily x 5 days

If patient is receiving VTE prophylaxis choose repeat CBC with differential:

Complete Blood Count (CBC) with differential, start on POD 1 in AM and repeat every 3 days x 5 times

□ PT INR, start on POD 1 in AM and repeat daily x 5 days

 \Box PTT, start on POD 1 in AM and repeat daily x 5 days

□ Albumin, start on POD 1 in AM and repeat daily x 5 days

 \Box ALP, start on POD 1 in AM and repeat daily x 5 days

 \Box ALT, start on POD 1 in AM and repeat daily x 5 days

- \Box AST, start on POD 1 in AM and repeat daily x 5 days
- Bilirubin Total, start on POD 1 in AM and repeat daily x 5 days

 \Box Calcium (Ca), start on POD 1 in AM and repeat daily x 5 days

□ Creatinine, start on POD 1 in AM and repeat daily x 5 days

 \Box Electrolytes (Na, K, Cl, CO₂), start on POD 1 in AM and repeat daily x 5 days

 \Box GGT, start on POD 1 in AM and repeat daily x 5 days

□ Glucose Random, start on POD 1 in AM and repeat daily x 5 days

 \Box LD, start on POD 1 in AM and repeat daily x 5 days

 \Box Lipase, start on POD 1 in AM and repeat daily x 5 days

 \Box Magnesium (Mg), start on POD 1 in AM and repeat daily x 5 days

□ Phosphate, start on POD 1 in AM and repeat daily x 5 days

□ Urea, start on POD 1 in AM and repeat daily x 5 days

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Intravenous Therapy		
☑ sodium chloride 0.9% lock when patient tolerating or	al fluid intake	
I actated ringer's infusion IV at 100 mL/hour if patient not tolerating oral fluid intake, lock when patient tolerating oral fluid intake		
potassium chloride 20 mmol in dextrose 5% (D5W) – sodium chloride 0.45% infusion IV at 100 mL/hour if patient not tolerating oral fluid intake, lock when patient tolerating oral fluid intake		
Other Intravenous Therapy:		
Medications		
VTE Prophylaxis		
Refer to AHS Provincial Clinical Knowledge Topic: VTE Prophylaxis, Adult – Inpatient. Refer to AHS VTE Weight-Band Table if patient has reduced renal function or is less than 40 kg or greater than 100 kg.		
If patient has undergone abdominopelvic cancer surgery or i Thromboembolism Prophylaxis Guideline) consider extended molecular weight heparin (LMWH). Choose ONE:	d prophylaxis (up to 4 weeks post-discha	rge) with low
□ tinzaparin 4500 units SUBCUTANEOUSLY once dail discharge	y at hours <i>(hh mm)</i> , start on F	POD until
□ tinzaparin 4500 units SUBCUTANEOUSLY once dail extend therapy for 28 days	y at hours <i>(hh mm)</i> , start on F	POD and
Teach LMWH self-injection in preparation for discl	harge	
Other VTE Prophylaxis:		
Antiulcer Agents and Acid Suppressants	st until discharge	
If patient is unable to tolerate oral or enteral medication	n choose BOTH:	
□ pantoprazole 40 mg IV daily x 48 hours		
AND THEN		
pantoprazole EC tab 40 mg PO daily before breakfar pantoprazole	st until discharge, start after 48 hours	of IV
Bowel Stimulation		
Chew gum 3 times daily (minimum 30 minutes each <i>Choose ONE:</i>	time), as tolerated	
□ magnesium gluconate 1000 mg PO BID, start on PC	DD 1 and discontinue after first bowel	movement
 polyethylene glycol 3350 powder 17 g PO daily until Other Bowel Stimulation: 	discharge, start on POD 1	
Analgesics		
Consider non-opioid analgesia or appropriate opioid-sparing recommended. Long acting opioids should be avoided.	multimodal analgesia. If needed, short a	cting opioids are
Follow Anesthesia/Acute Pain Service orders for conpatient controlled analgesia (PCA)	Follow Anesthesia/Acute Pain Service orders for continuous regional epidural, nerve block therapy and/or patient controlled analgesia (PCA)	
□ Follow Surgery orders for patient controlled analgesi	a (PCA)	
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Medications, continued

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Prophylaxis Analgesics Consider dose reduction if patient is elderly. Z acetaminophen 650 mg PO every 6 hours x 48 hours and then acetaminophen 650 mg PO every 6 hours PRN for pain. Maximum of 4000 mg acetaminophen in 24 hours from all sources Use caution if patient has renal impairment or is at high risk of acute kidney injury. □ ibuprofen 400 mg PO every 6 hours x 48 hours and then ibuprofen 400 mg PO every 6 hours PRN for pain **PRN Oral Opioids** (for pain not controlled by non-opioid analgesia) Consider dose reduction if patient is elderly or opiate-naïve. □ oxyCODONE 5 to 10 mg PO every 4 hours PRN for pain not controlled by non-opioid analgesia PRN Parenteral Opioids (for pain not controlled by oral opioids, or oral analgesia is contraindicated) Consider dose reduction if patient is elderly or opiate-naïve. Choose ONE: □ morphine 1 to 10 mg IV/SUBCUTANEOUSLY every 4 hours PRN for pain not controlled by oral opioids □ HYDROmorphone 0.5 to 2 mg IV/SUBCUTANEOUSLY every 4 hours PRN for pain not controlled by oral opioids □ Other Analgesics:

Antiemetics

Prophylaxis Antiemetics

Consider dose reduction if patient is elderly or has reduced renal function.

Choose BOTH:

- □ ondansetron 8 mg PO/NG (or ODT if difficulty swallowing or active vomiting with no IV access) every 8 hours x 48 hours **and then** ondansetron 4 mg PO/NG every 8 hours PRN
- □ ondansetron 4 mg IV every 8 hours x 48 hours **and then** ondansetron 4 mg IV every 8 hours PRN if oral dose is **not** tolerated

PRN Antiemetics

Consider dose reduction if patient is elderly or has reduced renal function.

□ metoclopramide 10 mg PO/NG/IV/IM every 6 hours PRN

□ dimenhyDRINATE 25 to 50 mg PO/IV/IM every 4 hours PRN

□ Other Antiemetics:

Glycemic Management Medications

Refer to AHS Perioperative Management of Patients with Diabetes Mellitus, Adult – Inpatient Clinical Knowledge Topic.

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□ Other Consults a	nd Referrals:

Consults and Referrals

□ Registered Dietitian

□ Transition Services

Other Orders

□ Physiotherapy

□ Social Work

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Time (hh mm)