Enhanced Recovery After Surgery (ERAS) for Phalloplasty Pathway

Site Applicability

Vancouver General Hospital

Pathway Patient Goals

Inclusion Criteria

Home Discharge Criteria

Instructions

1. Review pathway once per shift for patient care goals and expected outcomes
2. Do not document on this pathway, complete documentation in the Electronic Health Record (Cerner) or paper chart as per policy

Day of Surgery - OR Day	
Category	**Expected Outcomes**
Safety	• Bedside safety check
Fall Risk/Care Plan	• Fall prevention care plan in place • Risk assessed & new fall prevention care plan completed • Not at risk: reviewed & no concerns
Gender Care Plan	• Preferred name confirmed and highlighted on name band & in Cerner if different from BC Care Card
Cognition	• Alert & Oriented x 3 (person, place, date)
Assessment	• VS and temp within patient's normal limits • Head to toe assessment (within patient's normal limits) • Anxiety level acceptable to patient
Pain Management	• Surgical pain level acceptable to patient • Bladder spasms controlled • Pruritus controlled
Bowel/Bladder	• Urine output more than 100ml in 4 consecutive hours • Suprapubic indwelling catheter to straight drainage • Urethral catheter (as stent) • **Catheter(s) to remain in situ and only to be removed by surgeon** • Suprapubic catheter secured and catheter care completed q shift • Abdomen soft, not distended, non-tender • Flatus passed • Note date of last BM
Nutrition & Hydration	• Clear fluids (xanthine-free) • Gum chewing (15 minutes TID) • Nausea controlled • Absence of vomiting
Flap	• Warm room 27 to 30 degrees Celsius • Air driven temperature management blanket • Flap check q1h x 72 hours (document accordingly) • Absence of phallus edema • Absence of blisters on phallus • No constriction at pedicle/anastomosis location (no tight dressings, external pressure) • Phallus in cradle pointed upward and away from thigh incision • Ointment to phallus incisions BID as ordered
Donor Site	• VAC negative pressure wound therapy (NPWT) to Integra or skin graft (document accordingly) • Neurovascular checks to donor hand q4h (document accordingly) • Free radial forearm donor site elevated • Skin graft donor site dressing (Transparent Drape/Transparent Drape with Aqaucel/Xeroform) • Pooling fluid under dressing aspirated prn • Secondary dressing intact
Drains	• Hemovac drain stripped • Hemovac drain emptied and recorded q6h • Groin Penrose drain intact

Functional Mobility	• HOB elevated 30 degrees when in bed, unless contraindicated • ERAS ankle and arm exercises • ICOUGH protocol followed • Full night sleep achieved • Bedrest: turned q2h until fully able to reposition on their own
Teaching & Discharge Planning • Patient is oriented to room/environment • Patient is aware of daily goals on clinical pathway • Review & reinforce Pain management pamphlet • Patient reviewed ERAS teaching booklet	

Day of Surgery – Post-Op Day 1	
Category	**Expected Outcomes**
Safety	• Bedside safety check
Fall Risk/Care Plan	• Fall prevention care plan in place • Risk assessed & new fall prevention care plan completed • Not at risk: reviewed & no concerns
Cognition	• Alert & Oriented x 3 (person, place, date)
Assessment	• VS and temp within patient's normal limits • Head to toe assessment (within patient's normal limits) • Anxiety level acceptable to patient • Lab values within normal limits
Pain Management	• Pain level acceptable to patient • Bladder spasms controlled • Pruritus controlled
Bowel/Bladder	• Urine output more than 100ml in 4 consecutive hours • Suprapubic indwelling catheter to straight drainage • Urethral catheter (as stent) • **Catheter(s) to remain in situ and only to be removed by surgeon** • Suprapubic catheter secured and catheter care completed q shift • Abdomen soft, not distended, non-tender • Flatus passed • Note date of last BM
Nutrition & Hydration	• Full fluids to Post Surgical Transition to Regular diet (xanthine-free) • Boost 1.5 Tetra 240 ml BID • Gum chewing (15 minutes TID) • Nausea controlled • Absence of vomiting • Saline lock IV if drinking 600 ml or more fluids in 12 hours
Flap	• Warm room 27 to 30 degrees Celsius • Air driven temperature management blanket • Flap check q1h x 72 hours (document accordingly) • Absence of phallus edema • Absence of blisters on phallus • No constriction at pedicle/anastomosis location (no tight dressings, external pressure) • Phallus in cradle pointed upward and away from thigh incision • Ointment to phallus incisions BID as ordered
Donor Site	• VAC negative pressure wound therapy (NPWT) to Integra or skin graft (document accordingly) • Neurovascular checks to donor hand q4h (document accordingly) • Free radial forearm donor site elevated (OT to make splint and splint on) • Skin graft donor site dressing (Transparent Drape/Transparent Drape with Aqaucel/Xeroform) • Pooling fluid under dressing aspirated prn • Secondary dressing removed to expose Xeroform • Xeroform free from slime & excessive dried blood

	• Exudry placed under dependent areas • Linens/gown free from site
Drains	• Hemovac drain stripped • Hemovac drain emptied and recorded q6h • Groin Penrose drain intact
Functional Mobility	• HOB elevated 30 degrees when in bed, unless contraindicated • ERAS ankle and arm exercises • ICOUGH protocol followed • Full night sleep achieved • Bedrest: turned q2h until fully able to reposition on their own
Teaching & Discharge Planning • Patient is oriented to room/environment • Patient is aware of daily goals on clinical pathway • Review & reinforce Pain management pamphlet • Patient reviewed ERAS teaching booklet	

Day of Surgery – Post-Op Day 2	
Category	**Expected Outcomes**
Safety	• Bedside safety check
Fall Risk/Care Plan	• Fall prevention care plan in place • Risk assessed & new fall prevention care plan completed • Not at risk: reviewed & no concerns
Cognition	• Alert & Oriented x 3 (person, place, date)
Assessment	• VS and temp within patient's normal limits • Head to toe assessment (within patient's normal limits) • Anxiety level acceptable to patient
Pain Management	• Pain level acceptable to patient • Bladder spasms controlled • Pruritus controlled
Bowel/Bladder	• Urine output more than 100ml in 4 consecutive hours • Suprapubic indwelling catheter to straight drainage • Urethral catheter (as stent) • **Catheter(s) to remain in situ and only to be removed by surgeon** • Suprapubic catheter secured and catheter care completed q shift • Abdomen soft, not distended, non-tender • Flatus passed • Note date of last BM
Nutrition & Hydration	• Full fluids to Post Surgical Transition to Regular diet (xanthine-free) • Boost 1.5 Tetra 240 ml BID • Gum chewing (15 minutes TID) • Nausea controlled • Absence of vomiting • Saline lock IV if drinking 600 ml or more fluids in 12 hours
Flap	• Warm room 27 to 30 degrees Celsius • Air driven temperature management blanket • Flap check q1h x 72 hours (document accordingly) • Absence of phallus edema • Absence of blisters on phallus • No constriction at pedicle/anastomosis location (no tight dressings, external pressure) • Phallus in cradle pointed upward and away from thigh incision • Ointment to phallus incisions BID as ordered
Donor Site	• VAC negative pressure wound therapy (NPWT) to Integra or skin graft (document accordingly) • Neurovascular checks to donor hand q4h (document accordingly) • Free radial forearm donor site elevated (OT to make splint and splint on) • Skin graft donor site dressing (Transparent Drape/Transparent Drape with Aqaucel/Xeroform) • Pooling fluid under dressing aspirated prn • Exposed xeroform free from slime & excessive dried blood • Exudry placed under dependent areas • Linens/gown free from site

Drains	• Hemovac drain stripped • Hemovac drain emptied and recorded q6h • Groin Penrose drain intact
Functional Mobility	• HOB elevated 30 degrees when in bed, unless contraindicated • ERAS ankle and arm exercises • ICOUGH protocol followed • Full night sleep achieved • Bedrest: turned q2h until fully able to reposition on their own
Teaching & Discharge Planning • Patient is oriented to room/environment • Patient is aware of daily goals on clinical pathway • Review & reinforce Pain management pamphlet • Patient reviewed ERAS teaching booklet	

Day of Surgery – Post-Op Day 3	
Category	**Expected Outcomes**
Safety	• Bedside safety check
Fall Risk/Care Plan	• Fall prevention care plan in place • Risk assessed & new fall prevention care plan completed • Not at risk: reviewed & no concerns
Cognition	• Alert & Oriented x 3 (person, place, date)
Assessment	• VS and temp within patient's normal limits • Head to toe assessment (within patient's normal limits) • Anxiety level acceptable to patient
Pain Management	• Pain level acceptable to patient • Bladder spasms controlled • Pruritus controlled
Bowel/Bladder	• Urine output more than 100ml in 4 consecutive hours • Suprapubic indwelling catheter to straight drainage • Urethral catheter (as stent) • **Catheter(s) to remain in situ and only to be removed by surgeon** • Suprapubic catheter secured and catheter care completed q shift • Abdomen soft, not distended, non-tender • Flatus passed • Note date of last BM
Nutrition & Hydration	• Full fluids to Post Surgical Transition to Regular diet (xanthine-free) • Boost 1.5 Tetra 240 ml BID • Gum chewing (15 minutes TID) • Nausea controlled • Absence of vomiting • Saline lock IV if drinking 600 ml or more fluids in 12 hours
Flap	• Warm room 27 to 30 degrees Celsius • Air driven temperature management blanket • Flap check q1h x 72 hours, then transition to q2h x 48 hours (document accordingly)Absence of phallus edema • Absence to blisters on phallus • No constriction at pedicle/anastomosis location (no tight dressings, external pressure) • Phallus in cradle pointed upward and away from thigh incision • Ointment to phallus incisions BID as ordered
Donor Site	• VAC negative pressure wound therapy (NPWT) to Integra or skin graft (document accordingly) • Neurovascular checks to donor hand q4h (document accordingly) • Free radial forearm donor site elevated (OT to make splint and splint on) • Skin graft donor site dressing (Transparent Drape/Transparent Drape with Aqaucel/Xeroform) • Pooling fluid under dressing aspirated prn • Exposed xeroform free from slime & excessive dried blood • Exudry placed under dependent areas • Linens/gown free from site

Drains	• Hemovac drain stripped • Hemovac drain emptied and recorded q6h • Groin Penrose drain intact
Functional Mobility	• HOB elevated 30 degrees when in bed, unless contraindicated • ERAS ankle and arm exercises • ICOUGH protocol followed • Full night sleep achieved • Bedrest: turned q2h until fully able to reposition on their own
Teaching & Discharge Planning • Patient is oriented to room/environment • Patient is aware of daily goals on clinical pathway • Review & reinforce Pain management pamphlet • Patient reviewed ERAS teaching booklet	

Day of Surgery – Post-Op Day 4	
Category	**Expected Outcomes**
Safety	• Bedside safety check
Fall Risk/Care Plan	• Fall prevention care plan in place • Risk assessed & new fall prevention care plan completed • Not at risk: reviewed & no concerns
Cognition	• Alert & Oriented x 3 (person, place, date)
Assessment	• VS and temp within patient's normal limits • Head to toe assessment (within patient's normal limits) • Anxiety level acceptable to patient
Pain Management	• Pain level acceptable to patient • Bladder spasms controlled • Pruritus controlled
Bowel/Bladder	• Urine output more than 100ml in 4 consecutive hours • Suprapubic indwelling catheter to straight drainage • Urethral catheter (as stent) • **Catheter(s) to remain in situ and only to be removed by surgeon** • Suprapubic catheter secured and catheter care completed q shift • Abdomen soft, not distended, non-tender • Flatus passed • Note date of last BM
Nutrition & Hydration	• Regular diet (xanthine-free) • Boost 1.5 Tetra 240 ml BID • Gum chewing (15 minutes TID) • Nausea controlled • Absence of vomiting • Saline lock IV if drinking 600 ml or more fluids in 12 hours
Flap	• Warm room 27 to 30 degrees Celsius • Air driven temperature management blanket • Flap check q2h x 48 hours (document accordingly) • Absence of phallus edema • Absence of blisters on phallus • No constriction at pedicle/anastomosis location (no tight dressings, external pressure) • Phallus in cradle pointed upward and away from thigh incision • Ointment to phallus incisions BID as ordered
Donor Site	• VAC negative pressure wound therapy (NPWT) to Integra or skin graft (document accordingly) • Neurovascular checks to donor hand q4h (document accordingly) • Free radial forearm donor site elevated (OT to make splint and splint on) • Skin graft donor site dressing (Transparent Drape/Transparent Drape with Aqaucel/Xeroform) • Pooling fluid under dressing aspirated prn • Exposed xeroform free from slime & excessive dried blood • Exudry placed under dependent areas • Linens/gown free from site

Drains	• Hemovac drain stripped • Hemovac drain emptied and recorded q6h • Groin Penrose drain intact
Functional Mobility	• HOB elevated 30 degrees when in bed, unless contraindicated • ERAS ankle and arm exercises • ICOUGH protocol followed • Full night sleep achieved • Bedrest: turned q2h until fully able to reposition on their own
Teaching & Discharge Planning • Patient is oriented to room/environment • Patient is aware of daily goals on clinical pathway • Review & reinforce Pain management pamphlet • Patient reviewed ERAS teaching booklet	

Day of Surgery – Post-Op Day 5	
Category	**Expected Outcomes**
Safety	• Bedside safety check
Fall Risk/Care Plan	• Fall prevention care plan in place • Risk assessed & new fall prevention care plan completed • Not at risk: reviewed & no concerns
Cognition	• Alert & Oriented x 3 (person, place, date)
Assessment	• VS and temp within patient's normal limits • Head to toe assessment (within patient's normal limits) • Anxiety level acceptable to patient
Pain Management	• Pain level acceptable to patient • Bladder spasms controlled • Pruritus controlled
Bowel/Bladder	• Urine output more than 100ml in 4 consecutive hours • Suprapubic indwelling catheter to straight drainage • Urethral catheter (as stent) • **Catheter(s) to remain in situ and only to be removed by surgeon** • Suprapubic catheter secured and catheter care completed q shift • Abdomen soft, not distended, non-tender • Flatus passed • Note date of last BM
Nutrition & Hydration	• Regular diet (xanthine-free) • Boost 1.5 Tetra 240 ml BID • Gum chewing (15 minutes TID) • Nausea controlled • Absence of vomiting • Saline lock IV if drinking 600 ml or more fluids in 12 hours
Flap	• Warm room 27 to 30 degrees Celsius • Air driven temperature management blanket • Flap check q2h x 48 hours, then transition to q4h x 48 hours (document accordingly) • Absence of phallus edema • Absence of blisters on phallus • No constriction at pedicle/anastomosis location (no tight dressings, external pressure) • Phallus in cradle pointed upward and away from thigh incision • Ointment to phallus incisions BID as ordered
Donor Site	• VAC negative pressure wound therapy (NPWT) to integra or skin graft (document on Wound flowsheet) • ½ slab cast removed • If Integra, VAC reapplied • If skin graft, protective dressing to tissue donor site when ambulating or while asleep • Neurovascular checks to donor hand q4h • Free radial forearm donor site elevated, splint on • Skin graft donor site dressing (Transparent Drape/Transparent Drape with Aqaucel/Xeroform)

	• Pooling fluid under dressing aspirated prn • Exposed Xeroform free from slime & excessive dried blood • Exudry placed under dependent areas • Linens/gown free from site
Drains	• Hemovac drain stripped • Hemovac drain emptied and recorded q6h • Groin Penrose drain intact
Functional Mobility	• HOB elevated 30 degrees when in bed, unless contraindicated • ERAS ankle and arm exercises • ICOUGH protocol followed • Full night sleep achieved
Teaching & Discharge Planning • Patient is oriented to room/environment • Patient is aware of daily goals on clinical pathway • Review & reinforce Pain management pamphlet • Patient reviewed ERAS teaching booklet	

Day of Surgery – Post-Op Day 6	
Category	**Expected Outcomes**
Safety	• Bedside safety check
Fall Risk/Care Plan	• Fall prevention care plan in place • Risk assessed & new fall prevention care plan completed • Not at risk: reviewed & no concerns
Cognition	• Alert & Oriented x 3 (person, place, date)
Assessment	• VS and temp within patient's normal limits • Head to toe assessment (within patient's normal limits) • Anxiety level acceptable to patient
Pain Management	• Pain level acceptable to patient • Bladder spasms controlled • Pruritus controlled
Bowel/Bladder	• Urine output more than 100ml in 4 consecutive hours • Suprapubic indwelling catheter to straight drainage • Urethral catheter (as stent) • **Catheter(s) to remain in situ and only to be removed by surgeon** • Suprapubic catheter secured and catheter care completed q shift • Abdomen soft, not distended, non-tender • Flatus passed • Note date of last BM
Nutrition & Hydration	• Regular diet (xanthine-free) • Boost 1.5 Tetra 240 ml BID • Gum chewing (15 minutes TID) • Nausea controlled • Absence of vomiting • IV Saline locked
Flap	• Air driven temperature management blanket • Flap check q4h x 48 hours (document accordingly) • Absence of phallus edema • Absence of blisters on phallus • No constriction at pedicle/anastomosis location (no tight dressings, external pressure) • Phallus in cradle pointed upward and away from thigh incision • Ointment to phallus incisions BID as ordered
Donor Site	• VAC negative pressure wound therapy (NPWT) to integra or skin graft (document accordingly) • ½ slab cast removed • If Integra, VAC reapplied • If skin graft, protective dressing to tissue donor site when ambulating or while asleep • Neurovascular checks to donor hand q4h • Free radial forearm donor site elevated, splint on • Skin graft donor site dressing (Transparent Drape/Transparent Drape with Aqaucel/Xeroform) • Pooling fluid under dressing aspirated prn • Exposed Xeroform free from slime & excessive dried blood

	• Exudry placed under dependent areas • Linens/gown free from site
Drains	• Hemovac drain stripped • Hemovac drain emptied and recorded q6h • Groin Penrose drain intact • Penrose drain removed
Functional Mobility	• HOB elevated 30 degrees when in bed, unless contraindicated • ERAS ankle and arm exercises • ICOUGH protocol followed • Ambulate (standing/walking) with phallus protected and pointing upwards (mesh pants); with assistance or independently • Independent with ADLs as per pre-op status • Full night sleep achieved
Teaching & Discharge Planning • Patient is oriented to room/environment • Patient is aware of daily goals on clinical pathway • Review & reinforce Pain management pamphlet • Patient reviewed ERAS teaching booklet • Urinary catheter teaching for home • Patient has arranged transportation for discharge • Patient has arranged for support person at home for 72 hours post discharge • Discharge destination confirmed	

Day of Surgery – Post-Op Day 7	
Category	**Expected Outcomes**
Safety	• Bedside safety check
Fall Risk/Care Plan	• Fall prevention care plan in place • Risk assessed & new fall prevention care plan completed • Not at risk: reviewed & no concerns
Cognition	• Alert & Oriented x 3 (person, place, date)
Assessment	• VS and temp within patient's normal limits • Head to toe assessment (within patient's normal limits) • Anxiety level acceptable to patient
Pain Management	• Pain level acceptable to patient • Bladder spasms controlled • Pruritus controlled
Bowel/Bladder	• Urine output more than 100ml in 4 consecutive hours • Suprapubic indwelling catheter to straight drainage • Urethral catheter (as stent) • **Catheter(s) to remain in situ and only to be removed by surgeon** • Suprapubic catheter secured and catheter care completed q shift • Abdomen soft, not distended, non-tender • Flatus passed • Note date of last BM
Nutrition & Hydration	• Regular diet (xanthine-free) • Boost 1.5 Tetra 240 ml BID • Gum chewing (15 minutes TID) • Nausea controlled • Absence of vomiting • IV Saline locked
Flap	• Air driven temperature management blanket • Flap check q4h x 48 hours, then transition to q6h until discharge (document accordingly) • Absence of phallus edema • Absence of blisters on phallus • No constriction at pedicle/anastomosis location (no tight dressings, external pressure) • Phallus in cradle pointed upward and away from thigh incision • Ointment to phallus incisions BID as ordered
Donor Site	• VAC negative pressure wound therapy (NPWT) to integra, reapply VAC (if not done) • If skin graft, protective dressing to tissue donor site when ambulating or while asleep • Neurovascular checks to appropriate hand q4h • Free radial forearm donor site elevated, splint on • Skin graft donor site dressing (Transparent Drape/Transparent Drape with Aqaucel/Xeroform) • Pooling fluid under dressing aspirated prn • Exposed Xeroform free from slime & excessive dried blood • Exudry placed under dependent areas

	• Linens/gown free from site
Drains	• Hemovac drain stripped • Hemovac drain emptied and recorded q6h • Groin Penrose drain intact • Penrose drain removed
Functional Mobility	• HOB elevated 30 degrees when in bed, unless contraindicated • ERAS ankle and arm exercises • ICOUGH protocol followed • Ambulate (standing/walking) with phallus protected and pointing upwards (mesh pants); with assistance or independently • Independent with ADLs as per pre-op status • Full night sleep achieved
Teaching & Discharge Planning • Patient is oriented to room/environment • Patient is aware of daily goals on clinical pathway • Review & reinforce Pain management pamphlet • Patient reviewed ERAS teaching booklet • Urinary catheter teaching for home • Patient has arranged transportation for discharge • Patient has arranged for support person at home for 72 hours post discharge • Discharge destination confirmed	

Day of Surgery – Post-Op Day 8 and Onward	
Category	**Expected Outcomes**
Safety	• Bedside safety check
Fall Risk/Care Plan	• Fall prevention care plan in place • Risk assessed & new fall prevention care plan completed • Not at risk: reviewed & no concerns
Cognition	• Alert & Oriented x 3 (person, place, date)
Assessment	• VS and temp within patient's normal limits • Head to toe assessment (within patient's normal limits) • Anxiety level acceptable to patient
Pain Management	• Pain level acceptable to patient • Bladder spasms controlled • Pruritus controlled
Bowel/Bladder	• Urine output more than 100ml in 4 consecutive hours • Suprapubic indwelling catheter to straight drainage • Urethral catheter (as stent) • **Catheter(s) to remain in situ and only to be removed by surgeon** • Suprapubic catheter secured and catheter care completed q shift • Abdomen soft, not distended, non-tender • Flatus passed • Note date of last BM
Nutrition & Hydration	• Regular diet (xanthine-free) • Boost 1.5 Tetra 240 ml BID • Gum chewing (15 minutes TID) • Nausea controlled • Absence of vomiting • IV Saline locked
Flap	• Air driven temperature management blanket • Flap check q6h until discharge (document accordingly) • Absence of phallus edema • Absence of blisters on phallus • No constriction at pedicle/anastomosis location (no tight dressings, external pressure) • Phallus in cradle pointed upward and away from thigh incision • Ointment to phallus incisions BID as ordered
Donor Site	• VAC negative pressure wound therapy (NPWT) to integra (reapply VAC if not done) • If skin graft, protective dressing to tissue donor site when ambulating or while asleep • Neurovascular checks to appropriate hand q4h • Free radial forearm donor site elevated, splint on • Skin graft donor site dressing (Transparent Drape/Transparent Drape with Aqaucel/Xeroform) • Pooling fluid under dressing aspirated prn • Exposed Xeroform free from slime & excessive dried blood • Exudry placed under dependent areas • Linens/gown free from site

Drains	• Hemovac drain stripped • Hemovac drain emptied and recorded q6h • Groin Penrose drain intact • Penrose drain removed
Functional Mobility	• HOB elevated 30 degrees when in bed, unless contraindicated • ERAS ankle and arm exercises • ICOUGH protocol followed • Ambulate (standing/walking) with phallus protected and pointing upwards (mesh pants); with assistance or independently • Independent with ADLs as per pre-op status • Full night sleep achieved
Teaching & Discharge Planning • Patient is oriented to room/environment • Patient is aware of daily goals on clinical pathway • Review & reinforce Pain management pamphlet • Patient reviewed ERAS teaching booklet • Patient has arranged transportation for discharge • Patient has arranged for support person at home for 72 hours post discharge • Discharge destination confirmed • Urinary catheter teaching for home	

Day of Discharge	
Category	**Expected Outcomes**
Discharge	• Discharged, accompanied • Physician has removed implanted Doppler and staple • Understands urinary catheter care • Has urinary catheter care equipment • Has discharge prescriptions • Has post-op instruction sheet • Has follow up information • Has all belongings • Understands when to seek medical attention for complications • Discharge destination confirmed

Developed By

Effective Date:	
Posted Date:	
Last Revised:	
Last Reviewed:	
Approved By:	
	Endorsed By: **Final Sign Off:**
Owners:	VCH
	Developer Lead(s): • Clinical Nurse Educator, Transplant, Urology, Gynecology, Plastics, VGH