SJHC Division of Plastic Surgery Referral Guidelines (for Infections, Soft Tissue Injuries, and Fractures/Dislocations)

Preamble:

To avoid delays in patient care at St. Joseph's Health Centre, a protocol has been developed with the intent to ensure that patients are referred to the most appropriate service from which a consult may be obtained.

The following table lists common diagnoses and anatomical locations of the issue/injury in the first two columns and suggests the most appropriate service for "Primary Referral" (i.e., the first service to be contacted to see the patient) and also lists possible services that (could be) secondarily consulted (i.e., "Additional Consultation(s)" where appropriate):

Referral Guidelines (for Infections, Soft Tissue Injuries, and Fractures/Dislocations):

INFECTIONS					
Clinical Presentation / Diagnosis	Anatomical Location	Modifying Factors	Primary Referral	Secondary Consultation(s	
Cellulitis/Abscess/ Deep Space Infection	Post Operative	Plastic Surgery patient	Plastic Surgery		
	Post Operative	Non-Plastic Surgery patient	Original Surgical Service		
	Face	No suspected collections or periorbital involvement	Internal Medicine	Plastic Surgery	
	Face	With a suspected superficial abscess	Plastic Surgery		
	Face	Involving parotid or with a suspected deep space abscess	OHNS/ENT		
	Face	With a suspected sinus source	OHNS/ENT		
	Face	With a suspected dental etiology	Dentistry/OMFS		
	Scalp		Plastic Surgery		
	Peri-orbital	Suspected pre-septal etiology	Plastic Surgery		
	Peri-orbital	Suspected post-septal etiology	Ophthalmology	Plastic Surgery	
	Neck	With a suspected superficial abscess	Plastic Surgery		
	Neck	Suspected deep space neck infection	OHNS/ENT	Plastic Surgery	
	Chest / Abdomen	Cellulitis only (no collections)	Internal Medicine	Plastic Surgery	
	Chest / Abdomen	With a suspected superficial abscess	Internal Medicine	Plastic Surgery	

<u>NB</u> – For the two above rows - If the patient is likely to require hospital admission for IV antibiotics and has multiple medical comorbidities, Internal Medicine should be the first specialty consulted (if the patient is likely to be discharged home and/or is medically uncomplicated, Plastic Surgery would be the first specialty consulted).

	Chest / Abdomen	With a suspected deeper soft tissue infection or abscess	Internal Medicine	Plastic Surgery General Surgery Thoracic Surgery
	Chest / Abdomen	With involvement ribs / intercostal spaces / Pleura	Thoracic Surgery	Internal Medicine Plastic Surgery
	Breast	Cellulitis only (no collections)	Internal Medicine	General Surgery Plastic Surgery
	Breast	With a suspected deeper abscess or mastitis	General Surgery	Plastic Surgery
	Breast	History of breast implant or breast reconstruction	Plastic Surgery	
	Genitalia	Male	Urology	Plastic Surgery General Surgery
	Genitalia	Female	Gynaecology	Plastic Surgery General Surgery
require hospital admission would be determined on a	for IV antibiotics, Inte case by case basis, v abscess/collection –	no abscess or collection suspected of rnal Medicine/Urology/Gynecology co with Plastic Surgery being available by Urology or Gynecology would be the f	ould be the first special of consultation as well),	ty consulted (this but if there is a
	Perineum / Perianal		General Surgery	
	Upper Extremity	Cellulitis only (no collections)	Internal Medicine	Plastic Surgery
	Upper Extremity	With abscess on imaging	Plastic Surgery	Internal Medicine
	Upper Extremity	Associated with wound(s)	Plastic Surgery	Wound Care Team Plastic Surgery
	Upper Extremity	Associated with elbow bursa	Orthopedics	Internal Medicine Plastic Surgery
	Upper Extremity	With suspected septic joint	Orthopedics	
	Upper Extremity	With suspected osteomyelitis	Internal Medicine	Orthopedics
	Hand or Wrist	Cellulitis only (no collections)	Internal Medicine	Plastic Surgery
	Hand or Wrist	With abscess on imaging	Plastic Surgery	Internal Medicine
	Hand or Wrist	With suspected suppurative tenosynovitis	Plastic Surgery	Internal Medicine
	Wrist Only	With suspected septic joint	Orthopedics	
	Wrist Only	With suspected osteomyelitis	Internal Medicine	Orthopedics
	Hand Only	With suspected septic joint or osteomyelitis	Plastic Surgery	Internal Medicine
	Lower Extremity	Cellulitis only (no collections)	Internal Medicine	Plastic Surgery
	Lower Extremity	With abscess on imaging	Internal Medicine	Plastic Surgery
	Lower Extremity	Associated with wound(s)	Internal Medicine	Wound Care Team Plastic Surgery
	Lower Extremity	Associated with knee bursa	Orthopedics	
	Lower Extremity	With suspected septic joint	Orthopedics	Internal Medicine Infectious Disease
	Lower Extremity	With suspected osteomyelitis	Internal Medicine	Orthopedics
	Ankle/Foot/Toes	Cellulitis only (no collections)	Internal Medicine	Plastic Surgery
	Ankle/Foot/Toes	With abscess on imaging	Internal Medicine	Plastic Surgery
	Ankle/Foot/Toes	Diabetic foot infections	Internal Medicine Orthopedics	Plastic Surgery

	Ankle/Foot/Toes	With suspected septic joint	Orthopedics	Plastic Surgery Infectious Disease
	Ankle/Foot/Toes	With suspected osteomyelitis	Internal Medicine	Orthopedics
	Ankle/Foot/Toes	Requiring amputations	Orthopedics	Internal Medicine
		npatient, Dr. Fu prefers that referrals Dr. Fu will review the referral and tria		
	Any Anatomic Area	Associated with a pressure sore	Internal Medicine	Wound Care Team Plastic Surgery
		dmission for IV antibiotics or because en Internal Medicine should also be c		
Necrotizing Soft Tissue Infections	Head & Neck		OHNS/ENT	Plastic Surgery
	Genitalia / Perineum	Male	Urology	General Surgery Plastic Surgery
	Genitalia / Perineum	Female	Gynaecology	General Surgery Plastic Surgery
	Any Other Anatomic Area		Plastic Surgery	

 $\underline{\textit{NB}}$ – If the patient is hemodynamically stable and CELLULITIS is the $\underline{\textit{most probable diagnosis}}$ (but NSTI is on the differential), then Internal Medicine (+/- Infectious Disease) should be the first service consulted.

<u>NB</u> – If the patient is hemodynamically unstable and **NSTI** is the <u>most probable diagnosis</u>, then an urgent ICU consultation should be made as well (and should be done by the Emergency Room Physician).

SOFT TISSUE INJURIES / OTHER DIAGNOSES

For Emergency Department (ED) patients, the ED physician may, at their clinical discretion, perform wound closure without consulting the on-call Plastic Surgeon, with follow-up in the Plastic Surgery Clinic.

Clinical Presentation / Diagnosis	Anatomical Location	Modifying Factors	Primary Consults	Secondary Consultation(s)
"Simple" Skin Lacerations	Any non-Facial Area	Patient is in the Emergency Department	Should be closed by	the ER Physician
	Any non-Facial Area	Patient is admitted to the Heath Centre	Plastic Surgery	
	Fingertip	Simple nailbed lacerations	Should be closed by	the ER Physician
	Any Anatomic Area	Self-inflicted	Psychiatry	Plastic Surgery
<u>NB</u> – If a patient admitted the patient will be escorted	d to Psychiatry require ed to the Emergency I	es repair of a laceration and it as "afte Department for its repair.	r hours", a new guideline	e/policy dictates that
"Complex" Skin Lacerations	Any Anatomic Area	>20 cm, deep to fascia, significant undermining	Plastic Surgery	
	Fingertip	Complex nailbed lacerations	Plastic Surgery	
	Fingertip	Significant partial or complete amputations	Plastic Surgery	
"Simple" Facial Lacerations	Any Facial Area	Small lacerations not through "sensitive structures"	Should be closed by	the ER Physician

Complex" Facial acerations	Ear	Involving the external auditory canal/meatus	OHNS/ENT	
	Ear	All other ear lacerations	Plastic Surgery	
	Eyelid	With suspected globe involvement	Ophthalmology	Plastic Surgery
	Eyelid	With suspected lacrimal duct / system involvement	Ophthalmology	Plastic Surgery
	Eyelid	All other eyelid lacerations	Plastic Surgery	
	Cheek	With suspected parotid (Stensen's) duct involvement	OHNS/ENT	Plastic Surgery
	Cheek	With suspected facial nerve involvement	OHNS/ENT	Plastic Surgery
	Cheek	Other complex cheek lacerations (full thickness, through muscle)	Plastic Surgery	
	Lips	White or red lip only	Should be closed by	the ER Physician
	Lips	Shorter than 1 cm (even if crossing the vermilion border)	Should be closed by	the ER Physician
	Lips	Longer than 1 cm (and crossing the vermilion border)	Plastic Surgery	
	Lips	Full thickness lacerations (skin, muscle and mucosa)	Plastic Surgery	
	Nasal	Involving underlying-cartilage	Plastic Surgery	OHNS/ENT
Neck	Neck	Superficial lacerations (less than 10 cm)	Should be closed by	the ER Physician
	Neck	Superficial lacerations (greater than 10 cm)	OHNS/ENT	Plastic Surgery
	Neck	With involvement of deeper structures	OHNS/ENT	Plastic Surgery
Tendon Lacerations	Elbow & Proximal		Orthopaedics	
	Ankle & Proximal	(e.g., Achilles or Tibialis Anterior)	Orthopaedics	Plastic Surgery
	Forearm, Hand & Foot		Plastic Surgery	
Nerve Lacerations	Brachial Plexus	Closed injury	Referral to Plastic Surgery Clinic	
	Brachial Plexus	Open injury (with no suspicion of vascular injury)	Plastic Surgery	
	Brachial Plexus	Open injury (with suspicion of vascular injury)	ER Physician to call (the patient	Criticall and transfe
	Upper Extremity	If minor laceration and vascularly intact	ER Physician to close referral to Plastic Sur	
	Upper Extremity	If major laceration and/or not vascularly intact	Plastic Surgery	
	Lower Extremity	If minor laceration and vascularly intact	ER Physician to close referral to Plastic Sur	
	Lower Extremity	If major laceration and/or not vascularly intact	Plastic Surgery	

Compartment Compartment				
Syndrome Syndrome	Upper Extremity	With no fracture	Plastic Surgery	
	Upper Extremity	With hand fractures	Plastic Surgery	
	Upper Extremity	With wrist (incl. carpal bones) or more proximal fractures	Orthopedics	Plastic Surgery
	Thigh	With fracture	Orthopedics	Plastic Surgery
	Thigh	With no fracture	Plastic Surgery	
	Lower Leg	With or without fracture	Orthopedics	Plastic Surgery
		by Orthopedics (and the patient is dand MRP responsibility while planning		for reconstruction),
	Abdominal		General Surgery	
<u>Burns</u>	Any Anatomic Area	Less than 5% TBSA	ER Physician to dre	
	Any Anatomic Area	Greater than 5% TBSA	Plastic Surgery	argery emile
	High Voltage Electrical Burn		Plastic Surgery	Internal Medicine
Pressurized Injection Injuries	Any Anatomic Area		Plastic Surgery	
IV Extravasation Injury	Any Anatomic Area		Plastic Surgery	
Hematoma	Ear		Plastic Surgery	
	Nasal Septum		OHNS/ENT	
	Post-Operative	Non-Plastic Surgery patient	Original Surgical Service	
	Any other		Internal Medicine	Plastic Surgery
	,		Plastic Surgery	
comorbidities, Internal M	hematoma ch a hematoma (e.g., lo Medicine should be the	ower leg) is likely to require hospital first specialty consulted (if the patiend be the first specialty consulted).		Internal Medicine iple medical
comorbidities, Internal M	hematoma ch a hematoma (e.g., lo Medicine should be the	first specialty consulted (if the patien	admission and has mult	Internal Medicine iple medical
comorbidities, Internal M medically uncomplicated Morel-Lavallee "Lesion" Other Common Soft	hematoma ch a hematoma (e.g., lu dedicine should be the d, Plastic Surgery would be the should be th	first specialty consulted (if the patiend be the first specialty consulted). Without a fracture With suspicion of bullous	admission and has mult it is likely to be discharg	Internal Medicine iple medical
comorbidities, Internal M medically uncomplicated Morel-Lavallee "Lesion" Other Common Soft	hematoma ch a hematoma (e.g., lu Medicine should be the d, Plastic Surgery would	first specialty consulted (if the patiend be the first specialty consulted). Without a fracture	admission and has mult it is likely to be discharg Plastic Surgery	Internal Medicine iple medical ed home and/or is
comorbidities, Internal M medically uncomplicated Morel-Lavallee	hematoma ch a hematoma (e.g., le Medicine should be the d, Plastic Surgery would Bullous Skin Diseases Bullous Skin	first specialty consulted (if the patiend be the first specialty consulted). Without a fracture With suspicion of bullous pemphigus/pemphigoid With suspicion of Erythema	admission and has mult it is likely to be discharg Plastic Surgery	Internal Medicine iple medical ed home and/or is Dermatology Dermatology
comorbidities, Internal M medically uncomplicated Morel-Lavallee "Lesion" Other Common Soft	hematoma ch a hematoma (e.g., le Medicine should be the d, Plastic Surgery would Bullous Skin Diseases Bullous Skin Diseases Pyoderma	first specialty consulted (if the patiend be the first specialty consulted). Without a fracture With suspicion of bullous pemphigus/pemphigoid With suspicion of Erythema	admission and has multitis likely to be discharged Plastic Surgery Internal Medicine Internal Medicine	Internal Medicine iple medical ed home and/or is Dermatology Dermatology Plastic Surgery

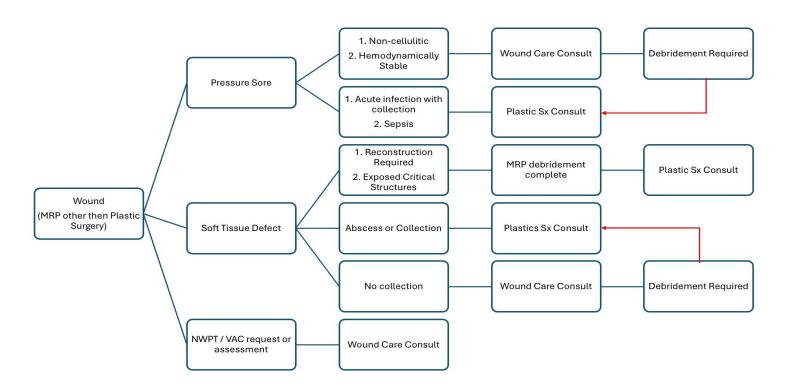
FRACT				
FR AL.	HRES.	<i>x.</i>) >	()(, A	

Clinical Presentation / Diagnosis	Anatomical Location	Modifying Factors	Primary Consults	Secondary Consultation(s)
Craniofacial Fractures	Frontal Bone	Skull base, posterior table, cranial fractures	ER Physician to call (the patient to a Level	
	Frontal Bone	Isolated anterior table frontal sinus fractures	Plastic Surgery	
	Orbital Floor, Roof or Wall	With suspicion of EOM entrapment	Plastic Surgery	Ophthalmology
	Orbital Floor, Roof or Wall	With no suspicion of EOM entrapment	ER Physician to close referral to Plastic Sur	
	Midface	LeFort fracture on CT scan	Plastic Surgery	
	Midface	Maxillary Sinus or Zygoma fracture on CT scan	ER Physician to close referral to Plastic Sur	
	Zygoma (aka OZC) Complex		ER Physician to close referral to Plastic Sur	gery Clinic
	Zygomatic Arch		ER Physician to close referral to Plastic Sur	gery Clinic
	Nose	Isolated nasal bone fractures	ER Physician to close referral to OHNS/ENT	Clinic
	Nose	With suspicion of NOE fracture(s)	ER Physician to close referral to Plastic Surg	
	Nose	With suspicion of a septal hematoma	OHNS/ENT	
	Mandible		Plastic Surgery	
	Mandible	With tooth and/or alveolar fractures	Plastic Surgery	Dentistry/OMFS
	Alveolar or tooth fracture / injury		Dentistry/OMFS	
Upper Extremity Fractures	Wrist and Proximal	<u>NB</u> - Wrist includes carpal bones	Orthopedics	
	Hand (MCs and Distal)	Closed injury	ER Physician to splin	t and referral to
	Hand (MCs and Distal)	Open injury (with no suspicion of vascular and/or nerve injury)	ER Physician to splin Plastic Surgery Clinic	and referral to
	Hand (MCs and Distal)	Open injury (with suspicion of vascular and/or nerve injury)	Plastic Surgery	
Upper Extremity Dislocations	Wrist	Carpus and proximal	Orthopaedics	
	CMC Joint(s)		Plastic Surgery	
	Hand (MCPJs and Distal)	Closed injury and reducible dislocation	ER Physician to reduce referral to Plastic Surg	
	Hand (MCPJs and Distal)	Open injury (with no suspicion of vascular injury) and reducible	ER Physician to reduce referral to Plastic Sur	ce, splint and
	Hand (MCs and Distal)	Irreducible dislocation (or suspicion of vascular injury)	Plastic Surgery	
Lower Extremity Fractures and/or Dislocations	Hip, knee, ankle, foot, toes		Orthopaedics	

<u>Plastic Surgery Consultation for Inpatients with Wounds</u> (for inpatients admitted under other services)

Key Points:

- The Plastic Surgery team will consult with and assist in the management of inpatients at SJHC who present with (or acquire) wounds
- The Plastic Surgery service works closely with our SJHC Wound Care team (and the vast majority of patients with wounds should initially be seen by the Wound Care team)
 - <u>NB</u> Examples of scenarios whereby a Plastic Surgery consultation should predate a Wound Care team consult include:
 - Acute infections with a possibility of a necrotizing soft tissue infection
 - Acute infections in patients with hemodynamic instability or sepsis
 - Acute infections with abscesses or collections confirmed on imaging
- A request for NWPT/VAC therapy/dressing does not require a consultation with Plastic Surgery
 - The Wound Care team can manage this and if required, they will consult Plastic Surgery for advice and/or help



<u>Plastic Surgery Consultation for Inpatients Requiring Reconstruction</u> (for inpatients admitted under other surgical services)

Key Points:

- The Plastic Surgery team will assist with closure and/or reconstruction of a patient admitted under another surgical service, provided that the wound has been adequately debrided ensuring that an appropriate initial debridement (and/or multiple debridements) have been conducted by the referring specialty
 - The Plastic Surgery service will not accept the care of the patient admitted under another service after a single debridement and/or "wash out" if devitalized tissue remains
- The patient's MRP will remain under the service/specialty/physician who admitted the patient until such time that the reconstruction has been completed
 - After the reconstruction has been completed, the patient could:
 - Remain under the admitting service (if discharge is expected imminently)
 - Be transferred to Plastic Surgery (if further postoperative care was expected to be required – and best done by the Plastic Surgery service)
 - Be transferred to Medicine (if medical comorbidities are expected to be the main reason for a prolonged admission)

