Children's Hospital Of Wisconsin

Co-Management Guidelines

To support collaborative care, we have developed guidelines for our community providers to utilize when referring to, and managing patients with, the pediatric specialists at Children's Hospital of Wisconsin. Co-management guidelines provide protocols for jointly managing patient cases between community providers and our pediatric specialists.

Ankle Sprain

Diagnosis	Referring provider's initial evaluation and management:	When to initiate referral to Sports Medicine/ Orthopedic Clinic:	What can referring provider send to Sports Medicine/ Orthopedic Clinic?	Specialist's workup will likely include:

Mechanism of Injury
• Rotational/twisting mechanism (ie. inversion, eversion)
• "High ankle sprain" (syndesmosis injury) - Forced dorsiflexion + eversion
 	
Signs and symptoms
• Pain
• Swelling
• Bruising
• Limping or difficulty bearing weight
• Instability
 	
Differential Diagnosis
• Ankle fracture
	Physical Exam
	• Inspection, palpation, ROM, strength
	• Special tests:
	  ○ Anterior drawer, Talar tilt tests for lateral ankle laxity
	  ○ Syndesmotic squeeze test to assess for syndesmotic injury
	
	Diagnostic Tests
	Radiographs indicated if the following are present per the Ottawa ankle and foot rules:
	• Ankle:
	  ○ Bony tenderness over the medial or lateral malleolus
	  ○ Inability to bear weight (4 steps) immediately after injury, in ED or physician's office
	• Foot:
	  ○ Bony tenderness of the base of the 5th metatarsal
	  ○ Bony tenderness of the navicular
		• Confirmed fracture
		• Severe sprain
		• Injury to syndesmosis
		• Uncertainty regarding diagnosis, treatment or and/or return to activity
		• Worsening symptoms or no/minimal improvement in 7-10 days
			1. **Using Epic**
			  • Please complete the external referral order
			In order to help triage our patients and maximize the visit, the following information would be helpful include with your referral order:
			  • Urgency of the referral
			  • What is the key question you would like answered?
			Note: Our office will call to schedule the appointment with the patient.
			
			2. **Not using Epic external referral order:**
			  • In order to help triage our patients maximize the visit time, please **fax** the above
				If no fracture initially diagnosed:
				• History and physical exam
				• Potentially repeat x-rays
				• Potentially advanced imaging (CT or MRI)
				• Boot or brace
				• Plan for rehabilitation, including possible PT referral, and return to play
				
				If confirmed fracture:
				• History and physical exam
				• Potentially repeat x-rays
				• Potentially advanced imaging (CT or MRI)
				• Immobilization in boot vs cast +/- crutches depending on type of injury

Updated by: Allison Duey-Holtz, APP
Updated on: 8/2/17

○ Salter Harris injury in skeletally immature patients ○ Posterior malleolus fracture ○ Medial malleolus fracture ○ Juvenile Tilleaux fracture ○ Triplane fracture • Syndesmosis injury • Maisonneuve fracture • Foot fracture	○ Inability to bear weight (4 steps) immediately after injury, in ED or physician's office Recommended views ○ Ankle - AP/lateral/mortise (weightbearing if possible) ○ Foot – AP/lateral/oblique (weightbearing if possible) ○ If clinically indicated: ▪ Tibia/fibula – AP/lateral **<u>Management:</u>** • If no fracture: ○ Rest, Ice, Compression, Elevation ○ Ibuprofen/acetaminophen as needed for pain ○ ACE bandage wrap or lace-up ankle brace for compression/support ○ Crutches for protected weightbearing if limping/difficulty weightbearing. Wean off as tolerated. ○ For severe sprains, consider walking boot if available and able to be applied and fitted appropriately • If fracture present: ○ Apply splint ○ Crutches – no bearing weight ○ Refer to Orthopedics/Sports Medicine • Return to activity after ankle sprain: ○ Physically ready to return: ▪ Able to ambulate and perform sport-specific activities (i.e. running, jumping and cutting) pain-free and with normal mechanics ○ Psychologically ready to return ○ Should perform ankle exercises for ROM, strength and neuromuscular control prior to return ○ Recommend lace-up ankle brace with PE/sports to decrease risk of re-injury		information to **(414-607-5288**) • It would also be helpful to include: • Chief complaint, onset, frequency • Recent progress notes • Labs and imaging results • Other Diagnoses • Office notes with medications tried/failed in the past and any lab work that may have been obtained regarding this patient's problems.	

Updated by: Allison Duey-Holtz, APP
Updated on: 8/2/17

References:

Wolfe MW, UHL TL, and McCluskey LC. Management of ankle sprains. *Am Fam Physician*. 2001; 63(1):93-104.

Tiemstra JD. Update on acute ankle sprains. *Am Fam Physician*. 2012; 85(12):1170-11-75.

Steill IG, Greenberg GH, McKnight RD, et al. Decision rules for the use of radiography in acute ankle injuries. Refinement and prospective validation. *JAMA*. 1993; 269(9):1127-1132.

Dowling S, Spooner CH, Liang Y, et al. Accuracy of Ottawa ankle rules to exclude fractures of the ankle and midfoot in children: a meta-analysis. *Acad Emerg Med*. 2009; 16(4):277-287.

Updated by: Allison Duey-Holtz, APP
Updated on: 8/2/17