



Adolescent Medicine Resident Curriculum

SPORTS MEDICINE

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Society for Adolescent Health and Medicine
Adolescent Medicine Resident Curriculum – Sports Medicine Module

MODULE AND LEARNING OBJECTIVES	TEACHING MATERIALS			CLINICAL AND COMMUNITY SETTINGS
	Readings and Videos	Interactive Learning Opportunities	Materials to Develop Educational Sessions	
SPORTS MEDICINE				
<p>Preparticipation Screen:</p> <ol style="list-style-type: none"> 1. Identify medical and family history components important in assessing an adolescent during a pre-participation screen 2. Recognize the medical conditions that limit participation in certain sports activities 3. Identify risk factors for abuse of performance enhancing drugs 	<p>Readings:</p> <ol style="list-style-type: none"> 1. Peterson AR, Bernhardt DT. The preparticipation sports evaluation. <i>Pediatr Rev</i> 2011;32(5):e53-65. 2. Roberts WO1, Löllgen H, Matheson GO. Advancing the preparticipation physical evaluation: an ACSM and FIMS joint consensus statement. <i>Clin J Sport Med.</i> 2014 Nov;24(6):442-7. 3. LaBotz M, Griesemer BA, Council On Sports Medicine and Fitness. Use of Performance-Enhancing Substances. <i>Pediatrics</i> 2016;138(1). <p>Podcasts:</p> <ol style="list-style-type: none"> 1. Advancing the Preparticipation Evaluation: A Conversation with Dr. William Roberts (Podcast) from the Clinical Journal of Sports Medicine Podcast Series https://player.fm/series/clinical-journal-of-sport-medicine-the-clinical-journal-of-sport-medicine-podcast/advancing-the-preparticipation-evaluation-a-conversation-with-dr-william-roberts 		<p>Online Resources:</p> <ol style="list-style-type: none"> 1. AAP Section on Sports Medicine and Fitness: Preparticipation Physical Evaluation Resources - PPE Monograph (2010) - also with links to forms https://services.aap.org/en/community/aap-councils/council-on-sports-medicine-and-fitness/preparticipation-physical-evaluation 	<ul style="list-style-type: none"> • Outpatient (adolescent clinic, primary care clinic, subspecialty clinics, sports medicine clinics)
<p>Common Injuries:</p> <ol style="list-style-type: none"> 1. Recognize and understand risk factors for common overuse injuries in adolescents such as patellofemoral pain syndrome, shoulder instability, tibial stress fracture, spondylolysis. 2. Recognize and diagnose common traumatic sports injuries in adolescents such as ACL tear, ankle sprain, patellar dislocation. 	<p>Readings:</p> <ol style="list-style-type: none"> 1. DiFiori JP. Evaluation of overuse injuries in children and adolescents. <i>Curr Sports Med Rep</i> 2010;9(6):372-8. 2. Valovich McLeod TC, Decoster LC, Loud KJ, Micheli LJ, Parker JT, Sandrey MA, et al. National Athletic Trainers' Association position statement: prevention of pediatric overuse injuries. <i>J Athl Train</i> 2011;46(2):206-20. 3. Brown T, Moran M. Pediatric Sports-Related Injuries. <i>Clin Pediatr (Phila)</i>. 2019 Feb;58(2):199-212. doi: 10.1177/0009922818810879. Epub 2018 Nov 27. 4. Cleary S, Chi V, Feinstein R. Female* athletes: managing risk and maximizing benefit. <i>Curr Opin Pediatr.</i> 2018 Dec;30(6):874-882. doi: 10.1097/MOP.0000000000000700. <p>Podcasts:</p> <ol style="list-style-type: none"> 1. Overuse Injuries & Burnout in Youth Sports with Dr. John DiFiori (lead author), Dr. Joel S. Brenner and Dr. Neeru Jayanthi. Available at: http://www.amssm.org/E-Learning.php 	<p>Interactive online cases available from the American Medical Society for Sports Medicine http://www.amssm.org/Case-Studies.php</p> <ol style="list-style-type: none"> 1. 32 Yo Woman With Excruciating Left Lower Extremity Pain https://www.amssm.org/32_yo_woman_with_excruciat-csa-203.html?StartPos=20&Part= 2. Knee Pain After A Slide Tackle In Football https://www.amssm.org/knee_pain_after_a_slide_ta-csa-119.html?StartPos=30&Part= 	<p>Online Resources:</p> <p>American College of Emergency Physicians - Sports Medicine</p> <ol style="list-style-type: none"> 1. Musculoskeletal Exam Series: Video Tutorials https://www.acep.org/how-we-serve/sections/sports-medicine/musculoskeletal-exam-series/ 	<ul style="list-style-type: none"> • Adolescent Clinic/Rotation • Resident Continuity Clinic • Sports Medicine Clinic (during adolescent rotation or separate rotation/ experience) • Emergency department • Acute/urgent care settings



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	Websites and Online Resources:			
	<ol style="list-style-type: none"> Overuse injuries in Children. American Assoc of Orthopedic Surgeons. http://orthoinfo.aaos.org/topic.cfm?topic=A00613 			

SPORTS MEDICINE – <i>continued</i>	TEACHING MATERIALS			CLINICAL AND COMMUNITY SETTINGS
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<p>Female Athlete Triad and Relative Energy Deficiency:</p> <ol style="list-style-type: none"> Identify components of the female athlete triad and the possible long-term health consequences associated with it Recognize that excessive exercise may result in relative energy deficiency in athletes and others focused on exercise for weight management Recognize athletes who are at risk for developing female athlete triad Describe possible treatment approaches to adolescents diagnosed with female athlete triad. <p><small>*Note that what is traditionally called "Female Athlete Triad" may also apply to youth of all genders</small></p>	<p>Readings:</p> <ol style="list-style-type: none"> Joy E, De Souza MJ, Nattiv A, Misra M, Williams NI, Mallinson RJ, et al. 2014 female athlete triad coalition consensus statement on treatment and return to play of the female athlete triad. <i>Curr Sports Med Rep</i> 2014;13(4):219-32. Mountjoy M, Sundgott-Borgen J, Burke L, et al. The IOC consensus statement: beyond the Female Athletic Triad—Relative Energy Deficiency in Sport (RED-S). <i>Br J Sports Med</i> 2014, 48:491-497. Weiss Kelly AK, Hecht S, Council on Sports Medicine and Fitness. The Female Athlete Triad. <i>Pediatrics</i> 2016;138(2). <p>Podcasts and Videos:</p> <ol style="list-style-type: none"> A Deeper Dive into the Female Athlete Triad with American Medical Society of Sports Medicine (AMSSM) members Drs. Elizabeth Joy and Aurelia Nattiv. Available from the American Medical Society for Sports Medicine E-learning Portal http://www.amssm.org/E-Learning.php Dr. Gloria Cohen presents The Female Athlete Triad at the ONSF Medical Education Conference for medical professionals held at Greenwich Hospital on November 8, 2014 https://www.youtube.com/watch?v=jbyLcZ0nZXg 	<p>American Medical Society for Sports Medicine - interactive online cases http://www.amssm.org/Case-Studies.php</p> <ul style="list-style-type: none"> Hip Pain in a College Runner https://www.amssm.org/hip_pain_in_a_collegiate_c-csa-356.html?StartPos=0&Part Devastating Fracture In An Adolescent Runner: Nature Vs. Nurture? https://www.amssm.org/devastating-fracture-in-a-csa-77.html <p>Sports Medicine in the Pediatric Office, 2nd Edition: American Academy of Pediatrics. Jordan D. Metzl MD, FAAP. Available from AAP for purchase (\$) and includes a skills-focused 2-hour DVD. https://shop.aap.org/sports-medicine-in-the-pediatric-office-2nd-edition-paperback/</p>	<p>Online Resources:</p> <ol style="list-style-type: none"> Female Athlete Triad Coalition. https://www.femaleandmaleathletetriad.org/professionals/ 	<ul style="list-style-type: none"> Adolescent Clinic/Rotation Eating disorder treatment center Pediatric/ Adolescent gynecology Sports medicine



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<p>Concussion:</p> <ol style="list-style-type: none"> 1. Recognize symptoms of sports-related concussion in adolescents 2. Describe “second impact syndrome” 3. Explain the importance of return to play guidelines and practice their implementation 	<p>Readings:</p> <ol style="list-style-type: none"> 1. Sport-Related Concussion in Children and Adolescents (AAP 2010; reaffirmed 2014). http://pediatrics.aappublications.org/content/126/3/597 <p>Podcasts: http://www.amssm.org/E-Learning.php</p> <ol style="list-style-type: none"> 1. Concussion Evaluation and Management with Dr. Jeffrey Kutcher https://soundcloud.com/bmjpodcasts/sport-medcast-concussion 2. Managing Concussion with Dr. Kim Harmon https://soundcloud.com/bmjpodcasts/kim-harmon-on-managing?in=bmjpodcasts/sets/bjism-1 	<p>CDC HEADS UP to Health Care Providers - Online Concussion Training. http://www.cdc.gov/headsup/providers/training/index.html</p>	<p>Online Resources:</p> <ol style="list-style-type: none"> 1. American Academy of Neurology Sports Concussion Toolkit https://www.aan.com/practice/sports-concussion-toolkit/ 2. CDC HEADS UP to Health Care Providers http://www.cdc.gov/headsup/providers/index.html 	<ul style="list-style-type: none"> • Adolescent Clinic • Emergency Room Rotation • Neurology/ concussion clinic • Continuity clinic • Sports medicine • College health

