Musculoskeletal/Dermatology
(01/06/2014-02/14/2014)
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Description
This module encompasses the study of the musculoskeletal and integumentary systems. Concepts include normal development, structure, and function of the musculoskeletal system and skin. Congenital malformations, pathological dysfunction, clinical and radiologic presentations of disease, and therapeutic principles of musculoskeletal and dermatologic disorders are discussed. Teaching methods include laboratory experiences that expose students to the gross appearance and relationships of musculoskeletal components, in addition to small group problem-based learning and clinical case presentations that center on normal and abnormal musculoskeletal and dermatologic function.

Module Pedagogy
Lecture: 26 hours
Team Based Learning: 16 hours
Self-Study and on-line cases: 24 hours
Histopathology Lab: 6 hours
Gross Anatomy Lab: 10 hours
Case-Based Group Discussion: 4 hours

Module Goals
The goal of the Musculoskeletal and Dermatology module is to use an integrated approach that combines basic science and clinical concepts, offered to a sophomore medical student through small group interactions, anatomical dissection, self-directed study, on-line tutorials, and practice of clinical skills. Students will gain foundational knowledge of structure and function of these systems in normal and abnormal conditions, resulting in a comprehensive understanding of pathophysiology of common musculoskeletal and dermatologic disorders.

Weekly Themes
Week 1: Dermatology/Bone/Joint Function
Week 2: Upper Extremity
Week 3: Lower Extremity and Vasculitis
Week 4: Diseases of the Spine and Autoimmune Disease
Week 5: Muscle Function and Pathology
Week 6: Self-Study and Exam

Major Competencies
1.5 Demonstrate honesty and integrity in educational and professional interactions.
2.1, 2.2, 2.3, 2.5 Demonstrate knowledge of normal structure and function, epidemiology, pathophysiology, and clinical manifestations of common conditions and diseases.
2.4 Demonstrate knowledge of the pharmacotherapeutic modalities for common conditions & disorders
3.4, 3.6 Perform basic interpretation of commonly used diagnostic tests and demonstrate skills in clinical reasoning.
3.8 Apply the principles of relieving total pain (physical, psychological, spiritual, social).

Case-Based Synthesis Topics
Week 1: The Family with Different Rashes
Week 2: Upper Extremity Injury Related to Surgery
Week 3: Crystal Induced Joint Disease
Week 4: Extraintestinal Manifestations of IBD
Week 5: Mixed Connective Tissue Disease
Week 6: Self-Study and Exam

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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</thead>
<tbody>
<tr>
<td>8-8:50 AM</td>
<td>Overview of the Approach to a Patient with Musculoskeletal Pain (Lecture)</td>
<td>Lower Extremity (Hip and Knee) (Self-Study)</td>
<td>Crystal Induced Joint Disease and Septic Arthritis (Self-Study)</td>
<td>Vasculitis/Systemic Sclerosis (Self-Study)</td>
<td>Individual and Group Quizzes</td>
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<tr>
<td>9-9:50 AM</td>
<td>Laboratory Testing and Synovial Fluid Analysis (Lecture)</td>
<td>Lower Extremity (Ankle and Foot) (Self-Study)</td>
<td>Crystal Induced Joint Disease and Septic Arthritis (Self-Study)</td>
<td>Vasculitis/Systemic Sclerosis (Self-Study)</td>
<td>Group Case Activity (Crystal Induced Joint Disease)</td>
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<tr>
<td>10-10:50 AM</td>
<td>Imaging of the Lower Extremity (Lecture)</td>
<td>Lower Extremity Cases (Team-Based Learning)</td>
<td>Other Inflammatory Arthropathies (Psoriatic, JIA, Ankylosing Spondylitis) (Self-Study)</td>
<td>Soft Tissue Infections (Team-Based Learning)</td>
<td>Group Case Activity (Crystal Induced Joint Disease)</td>
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<tr>
<td>11-11:50 AM</td>
<td>Pharmacologic Principles for Addressing Pain (Lecture)</td>
<td>Lower Extremity Cases (Team-Based Learning)</td>
<td>Other Inflammatory Arthropathies (Psoriatic, JIA, Ankylosing Spondylitis) (Self-Study)</td>
<td>Soft Tissue Infections (Team-Based Learning)</td>
<td>Multidisciplinary Rounds</td>
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