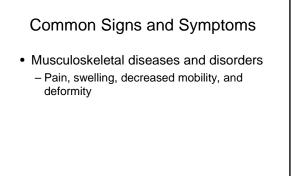


Anatomy and Physiology

- · Bones and Joints
- Bones provide framework and support; classified by shape and composition
- · Joints: where two or more bones meet
- Muscles structure, movement, and heat

3

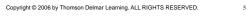
Copyright © 2006 by Thomson Delmar Learning. ALL RIGHTS RESERVED.

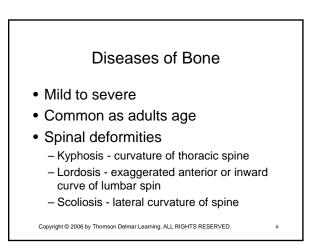


Copyright © 2006 by Thomson Delmar Learning. ALL RIGHTS RESERVED.

Diagnostic Tests

- X-rays
- CAT scans
- MRIs
- Blood studies including calcium, phosphorus
- Electromyography
- Muscle tissue biopsy





8

10

Disease of Bone

- Osteoporosis metabolic bone disease causing porosity and leading to a decrease in bone mass
- Osteomyelitis inflammation of bone caused by an staphylococcal infection

7

11

Copyright © 2006 by Thomson Delmar Learning. ALL RIGHTS RESERVED.

Diseases of Joints

- Most diseases occur as slow process
- Arthritis inflammation
- Osteoarthritis degenerative process
- Rheumatoid Arthritis autoimmune disorder affecting joints and connective tissue of entire body

Copyright © 2006 by Thomson Delmar Learning. ALL RIGHTS RESERVED.

Diseases of Joints

- Gout metabolic error in breakdown of certain protein foods
- Hallux Valgus deformity affecting the metatarsophalangeal joint of the big toe; commonly called bunion
- Tempromandibular Joint Syndromesevere headaches and pain in "jaw"

Copyright © 2006 by Thomson Delmar Learning. ALL RIGHTS RESERVED.

Diseases of Muscle and Connective Tissue

- Muscular Dystrophy (MD) inherited, genetic disorder affecting skeletal muscles
- Ganglion cyst fluid-filled benign tumor on a tendon sheath near the wrist
- · Tetanus also called "lockjaw"

Copyright © 2006 by Thomson Delmar Learning. ALL RIGHTS RESERVED.

Neoplasms

- Primary neoplasms of musculoskeletal system are uncommon
- Typically neoplasms are secondary, metastasizing from lungs, breast, and prostate

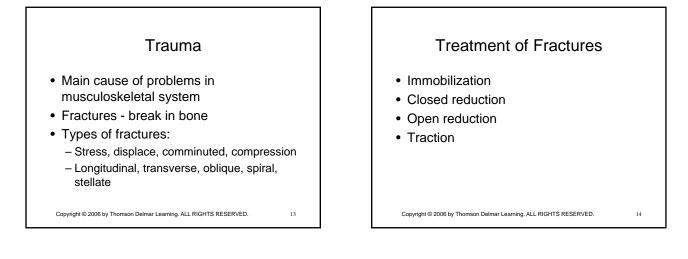
Copyright © 2006 by Thomson Delmar Learning. ALL RIGHTS RESERVED.

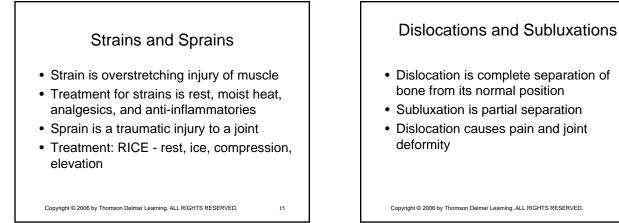
```
Neoplasms

• Osteosarcoma is most common tumor

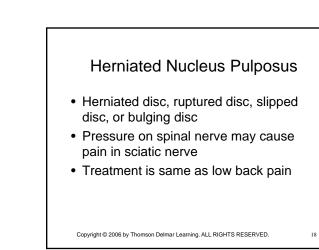
• Phabdomyosarcoma-very rare highly

malignant tumor of skeletal muscle
```





17

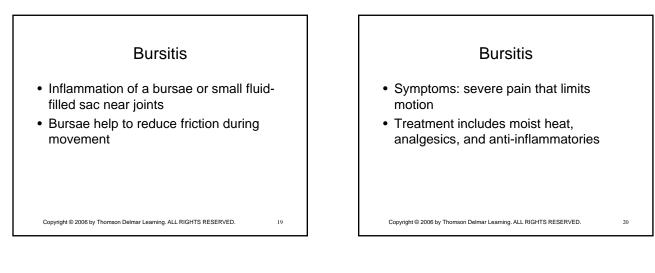


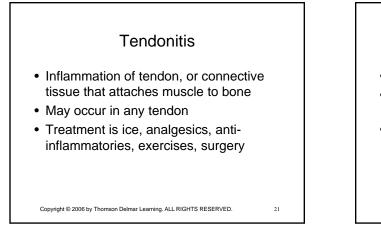
Low Back Pain

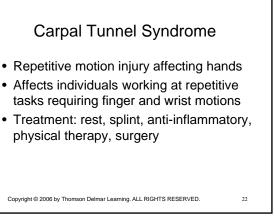
- Very common disorder
- · Pain may be acute or chronic
- Treatment is moist heat, analgesics, anti-inflammatory drugs, or muscle relaxants

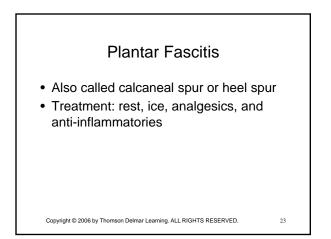
Copyright © 2006 by Thomson Delmar Learning. ALL RIGHTS RESERVED.

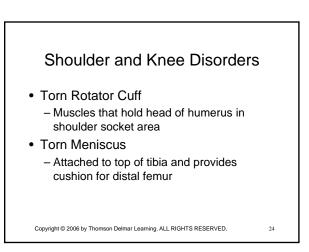
16











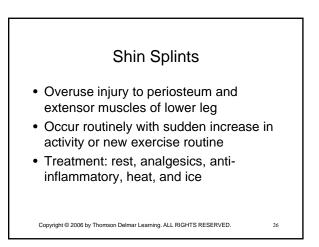
Shoulder and Knee Disorders

- Cruciate ligament tears
 Located inside knee joint
 - Two ligaments cross to stabilize knee

Copyright © 2006 by Thomson Delmar Learning. ALL RIGHTS RESERVED.

25

27



Rare Diseases

- de Quervain's tendonitis affecting thumb
- Tuberculosis of bone develops in tissue cavities leading to bone weakness and pain

Copyright © 2006 by Thomson Delmar Learning. ALL RIGHTS RESERVED.

<section-header><list-item><list-item><list-item><list-item><table-container><table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row>