Exercise Therapy

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Classification of Muscles

1. **Based on structure**
   Skeletal muscle: Striated, voluntary, attached to bones (e.g., biceps brachii)
   Smooth muscle: Non-striated, involuntary, in organs (e.g., intestine, blood vessels)
   Cardiac muscle: Striated, involuntary, found in heart
2. **Based on function**
   Voluntary muscles: Under conscious control (e.g., skeletal muscles for movement)
   Involuntary muscles: Automatic control (e.g., smooth muscles, cardiac muscle)
3. **Based on shape**
   Parallel: Fibers run parallel (e.g., sartorius)
   Pennate: Feather-like (e.g., rectus femoris)
   Circular: Surround openings (e.g., orbicularis oris)
   Convergent: Broad origin, narrow insertion (e.g., pectoralis major)
4. **Based on number of heads**
   Biceps: Two heads (e.g., biceps brachii)
   Triceps: Three heads (e.g., triceps brachii)
   Quadriceps: Four heads (e.g., quadriceps femoris)
5. **Based on action**
   Flexors: Decrease joint angle (e.g., biceps brachii)
   Extensors: Increase joint angle (e.g., triceps brachii)
   Abductors: Move away from midline (e.g., deltoid)
   Adductors: Move toward midline (e.g., adductor group)
   Rotators: Produce rotation (e.g., infraspinatus)
6. **Based on fiber arrangement**
   Fusiform: Spindle-shaped (e.g., biceps brachii)
   Flat: Thin and broad (e.g., external oblique)
   Circular: Ring-like (e.g., orbicularis oculi)