Anatomy and Ergonomics for Musicians: *How to have good posture and perform freely*

Proper posture and proper ergonomics is essential to playing your instrument freely and avoiding Playing Related Musculoskeletal Disorders (PRMD’s) and Repetitive Stress Injuries (RSI’s).

Playing Related Musculoskeletal Disorders (PRMD’s):
- 75% of players suffered from finger and/or hand pain
- Of those, 30% had tendonitis; 20% muscle problems
- 10% joint disorders, 15% neurological disorders
- 25% had elbow and forearm disorders

Risk Factors for developing PRMD’s:
- Playing > 4 hrs/day
- Forceful playing
- Playing octaves and difficult chords
- Poor ergonomics

**Improper Posture**

1. Cervical slant
2. Cervical hiperlordosis
3. Dorsal hipericofosis
4. Lumbar hiperlordosis

**Contraction of the neck trapezius muscles and the shoulder blades**

**Instable support on the ischiatic protuberance**

**Proper Posture**

1. Freedom of movement in the shoulder blades
2. The rachidian curves are straight
3. Body-weight supported by the ischiatic protuberances and the lower limbs

**Semicircular canals in a horizontal axis: correct listening position**

**Loose diaphragm: correct singing position**

**How to Avoid Repetitive Stress Injuries (RSI’s):**
1. Warm up properly
2. Maintain proper posture
3. Maintain a healthy shoulder and wrist position
4. Improve playing skills and techniques
5. Take regular breaks (5 min. break every 30 min.)
6. Relaxed body and mind
7. Good instrument fit
8. Specific exercises for posture & to reduce tension

**Resources:**
- Univ. of North Texas Cntr. for Music and Medicine
  www.unt.edu/tcmm
- Medical Problems of Performing Artists Journal
  www.sciandmed.com
- Musicians Health Information
  www.musicianshealth.com

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