

## Playing With Pain—Strategies for the Developing Instrumentalist

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The Midwest Clinic – December 2004

Medical problems affecting musical practice and performance are common in the young instrumentalist  
Involve members of marching and concert bands, orchestras, jazz bands, and other ensembles

### Causes and contributing factors

Related to making music – usually referred to as *overuse*

Factor #1: Exceeding the body's physiological limits for time x intensity of playing

Examples: Marching band camp, esp. on different instrument or role

New school/instructor/repertoire/instrument/private teacher

Factor #2: Technical factors (Some would call this *misuse*)

Examples: Using excessive muscle force; using additional/unneeded muscles

Factor #3: Genetic factors such as *hypermobility* (“double-jointedness”)

Abnormally great sound intensity, esp. in closed rooms

Not related to making music

Injury/trauma

School and club sports and other activities – esp. ball sports as cause of hand/wrist trauma

Falls, motor vehicle accidents, household injury

Overuse activities from part-time employment

### Types of medical problems produced

Music-related – from playing, marching, transporting instruments

Muscle strains – muscle can't keep adapting to heavy use; worst is microscopic tear of fibers

Tendinitis – inflammation of tendons, especially in hands, wrists, elbows

Miscellaneous

Nerve compression: in neck, upper extremity (uncommon, but wrist is primary location)

Foot problems related to marching: blisters, calluses, muscle strain

Skin problems: contact allergy to environmental substances, sunburn, heat exhaustion

Noise-induced hearing loss (nerve deafness; accumulative, permanent)

Non-music-related

A broad spectrum of fractures, joint dislocations, lacerations, contusions, strains, sprains, and damage to tendons/nerves

Nature and location usually depends on site and type of injury

Examples: Sprained or fractured fingers from playing many ball sports

Wrist fracture from fall on outstretched hand (running, slippery surfaces)

### Symptoms

Music-related problems

#1 – PAIN

Varies in nature and how it's manifested/perceived by the musician

Also: weakness, tightness, fatigue, warmth, stiffness, tenderness, ache, heaviness, cramping, warmth

Nerve symptoms a *very* distant second

Numbness, tingling – decrease in sensation

Weakness, clumsiness, coordination problems – changes in motor function

*Tinnitus* (ringing in ears)

Non-music-related problems

Depends on the problem; examples:

Fracture or joint injury: Pain, swelling, (often) deformity

Skin: Redness rash, hives, limp from painful blisters

(OVER)

## Diagnosis

- Made by health professional, esp. one who is trained and knowledgeable in musician's special needs
- Painful areas identified and localized by the physician
- Functional losses or limitations
- Exam with instrument most useful, esp. when musical overuse suspected as the cause
- History, physical examination are crucial to a correct and complete diagnosis
- Laboratory tests, including X-rays, when indicated

## Basics of treatment – music-related problems

- First, recognize that a problem exists and seek some kind of help for it
- Second, try to recognize the cause
- Primary treatment is rest – several variables
  - Avoiding or modifying the causative activity
  - Duration: At least long enough to relieve the pain
  - Sometime splinting or other assistive devices may be useful; physician can help here
- Medication occasionally needed, and should be prescribed by a physician

## Basics of treatment – non-music-related problems

- Trauma: Fix fracture, repair wounds, etc.
- Other problems: Specific for the medical condition
- Usually requires skilled evaluation and care by a physician

## For both types:

- Try to preserve some opportunities to play during treatment, if possible
- Early therapy to restore lost functions and prepare for return to music
  - Regain lost movement, strength, endurance, coordination
  - “Musical therapy” from teacher to regain playing skills
- Return to playing
  - When pain is gone
  - Prevent recurrence or new problems – gradual re-entry, avoid pain
  - When musician has regained muscle strength, endurance, and coordination which may have been lost or decreased during time of treatment
  - Modify practice routines or techniques if needed

## Basics of prevention

- Remember the causes of music-related problems and work to avoid them
- Application of logic and common sense, not always adequately present in students
- Practice modifications
  - Play 25, rest 5 minutes of every half-hour; leave the instrument during breaks
  - Decrease intensity of practice when practicable
    - Vary the practice schedule, repertoire
    - Practice techniques should minimize stressful repetition of passages
- Instrument modifications to minimize physical stress
  - Neck straps for clarinet, oboe
  - Floor pegs for low clarinets
  - Harness/ body support for low saxes and brass (marching)
- Environmental adaptations
  - Marching: Frequent breaks: adequate and appropriate fluids to replace losses in heat, humidity
    - Proper footwear, correctly sized; measure feet yearly
  - Loud, continuous music: Hearing protection (ear plugs, attenuators) for both indoor and outdoor use
    - Conductors, too!
  - Proper seating; seat should be level, not tilting backward
  - Use of sunscreen, head/body coverings and insect repellent for outdoor musical activities