

## Improving the Health of Music Students Together

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NECHA/NYSCHA Combined Meeting  
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## Disclaimers

- I have no financial conflicts of interest in this subject area.
- (Is that even possible?)
- I'm not a "musician".

## Learning Objectives

- 1. Discuss the key aspects of neuromusculoskeletal injuries in college-level music majors.
- 2. Ditto for vocal health issues.
- 3. Ditto for hearing protection.
- 4. Ditto for mental health problems.

## Overview

- Introduction: What do you want to learn?
- The NASM Accreditation Standard
- The common performance-related health issues for music students
- Questions and discussion

## History

- 1850: The University of Rochester is founded as a small Baptist men's college
- 1920's: George Eastman gives the UofR \$50 million, specifying that half of it be used to establish a music school and a medical/dental school
- 1983: Ralph joins the University Health Service staff

## The NASM Standard

- The National Association of Schools of Music accredits institutions of higher education that offer a degree in music
- In 2011, NASM announced a new accreditation standard requiring that students and faculty be educated about the health risks associated with performing and listening to music.

## The NASM Standard – Part 1

- Students enrolled in music unit programs and faculty and staff with employment status in the music unit must be provided basic information about the maintenance of health and safety within the contexts of practice, performance, teaching, and listening.

## The NASM Standard – Part 2

- For music majors and music faculty and staff, general topics include, but are not limited to, basic information regarding the maintenance of hearing, vocal, and musculoskeletal health and injury prevention.

## The NASM Standard – Part 3

- ... institutions or music programs will... identify for the benefit of students and other personnel as appropriate or as requested, resources that will enable them to make contact with (licensed medical) professionals for specific treatment or other medical care.

## Musculoskeletal Injuries

- 24 yr old Asian female grad student – piano
- 2 wks of new RUE pain related to playing
- She practices 3-4 hrs/day on her own and does 1-2 hrs/day of accompanying
- No daily prescription medications, NKDA
- R handed but no h/o RUE trauma

## Additional Questions

- What additional parts of the history would be helpful to know?
- What are the key components of the physical exam?
- Are any diagnostic tests indicated?

## Additional Information

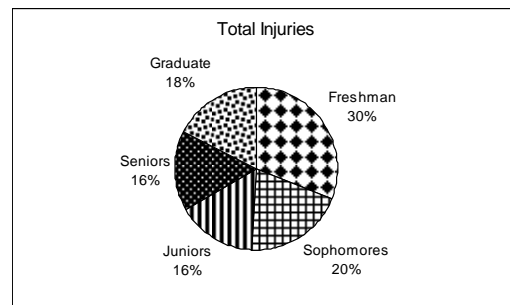
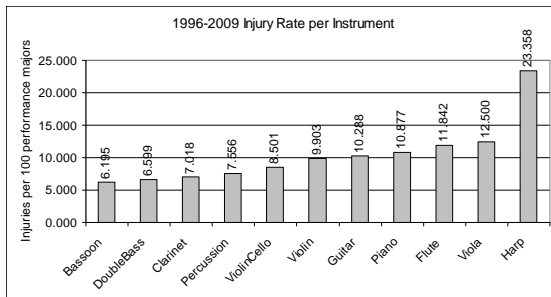
- She takes a break every hour during practice
- No regular exercise; no pain with ADL's.
- Working on a new piece with octave chords
- She tried some ibuprofen, but it didn't help
- She has a recital in one month
- Exam elicits pain with resisted finger abduction; hand span is barely one octave.

## Differential Diagnosis

- “Performance-related musculoskeletal disorder” and related terms
- Tendinitis vs tendinosis
- Peripheral neuropathy
- Thoracic outlet syndrome
- Focal dystonia
- Complex regional pain syndrome

## Management

- She’s not going to be able to play this piece successfully in the next month.
- Work with teacher on choice of repertoire.
- Consider using a 7/8 keyboard.
- Take more frequent breaks and reduce practice time during recovery.
- Be careful with other RUE activity.
- Regular exercise – what type?



## Other Risk Factors

- Female > male (approx 2 fold)
- Sudden increase in playing time
- Total playing time?
- Performance anxiety/stress

## Vocal Health Issues

- 20 yr old male tenor is sent in by his voice teacher to get a referral to Dr H.
- He had some raspiness in his upper range at his lesson last week; opera is in two wks.
- He admits to having some hoarseness when he wakes up in the morning most days.
- On no daily meds, NKDA

## Additional Questions?

- History?
- Physical exam?
- Diagnostic tests?

## Additional Information

- No recent URI, no known seasonal allergies
- He's on insurance through his parents
- Speaking voice sounds normal (at 2pm)
- HEENT, neck and lung exams are unremarkable, but he's a "big boy"
- Indirect laryngoscopy shows erythema of the posterior vocal folds

## Differential Diagnosis

- GERD/LPR
- PND due to URI or allergic rhinitis
- Voice misuse/abuse/overuse
- Vocal chord nodules
- Vocal chord hemorrhage
- Systemic disease (think hormonal)

## Management

- Of course, you refer him to Dr H.
- But you could tell him to take a PPI for a few weeks and work on GERD control measures (which is what Dr H will do after performing videostrobolaryngoscopy).

## Hearing Protection

- 21 yr old female violist comes in for evaluation of tinnitus x 1 month – both ears
- She thinks her hearing is ok; no ear pain
- No FH of hearing/ear problems

## Hearing Protection

- For classical musicians, “noise” exposure depends more on where you sit rather than what you play
- Sound pressure levels often exceed the OSHA standard (85 dB average over 8 hrs)
- Hearing protection must provide “flat attenuation”, eg the ER-15

## Mental Health

- 25 yr old male percussionist comes in for help with performance anxiety
- He gets shaky hands, sweaty palms, palpitations and queasy stomach during solo performances
- He has an audition in three days
- On no daily meds, NKDA
- Had asthma in childhood, ok for > 10 yrs

## Additional Questions

- History?
- Physical exam?
- Diagnostic tests?

## Additional Information

- No anxiety in other situations
- No personal or family history of heart disease
- Exam shows nl VS, thyroid, lungs and heart
- PFT's?

## Differential Diagnosis

- Situational anxiety/performance anxiety
- Panic disorder
- GAD
- Other psychiatric Dx
- Hyperthyroidism
- Pheochromocytoma?
- Lack of preparation

## Management

- In the absence of contraindications, low dose propranolol usually works well; warn them not to share their medicine.
- If remote h/o asthma or more recent EIB, consider low dose metoprolol (after PFT's?)
- Don't use benzodiazepines
- CBT also works well, but it takes time

## Resources

- Performing Arts Medicine Association  
[www.artsmed.org](http://www.artsmed.org)
- Medical Problems of Performing Artists  
[www.sciandmed.com/mppa](http://www.sciandmed.com/mppa)
- Performing Arts Medicine, 3<sup>rd</sup> edition, 2010, [www.sciandmed.com/tpam](http://www.sciandmed.com/tpam)
- Wm Dawson, Fit as a Fiddle: The Musician's Guide to Playing Healthy, 2007