

factors vs clusters or combinations of risk factors. Fifty years from now, a future generation of performing arts medicine professionals may look back on the early years of the field and wonder why it took so long to let go of a “single cause” explanation for pain in musicians. Of course, we would be in a better position to design studies that look at what is happening on the tissue level if we had more information from experimental studies. Both types of research feed the other type.

But negative studies almost always have more “power” than a statistical analysis would suggest. Dr. Brandfonbrener’s data show us more forcefully than has ever been done in the past that a large majority of students entering university to study and perform music have already suffered pain related to making music. We have had indirect evidence of this in the past, based on the studies done by Drs. Fry et al.² and Lockwood.³ They both showed that a significant proportion of adolescent instrumentalists who were attending a performing arts high school or were members of an elite youth orchestra had had performance-related pain. What we did not know from those two papers was what happened to those musicians after high school. Did those who reported pain tend to stop playing their instruments at an advanced level? Did those who did not report pain fail to achieve a high enough level of performance to gain admission to a postsecondary music school or program? While we

really need a prospective study that follows a cohort of musicians from high school (or before) through college to answer the question fully, it now appears that at least some “injured” high school musicians are able to become college-level music majors.

It would be interesting to compare the data reported in Dr. Brandfonbrener’s study with data from properly selected papers in the sports medicine literature. Clearly, we would want to choose sports that have more injuries related to repetitive motion than forceful collision: swimming, running, and crew might be good examples—we would have to first be sure that we compare “apples to apples.” This would require using the same definition for a “case” (is it based on the report of pain, missing time from the activity, or seeking care?) and for the population at risk (do we count episodes per individual or per hour of participation in the particular activity?). Anecdotally, based on doing preseason physical examinations on college athletes, I do not think the precollege injury rate for sports reaches 80%, especially if one looks only at sports that have a low rate of acute trauma. However, my experience has been at the Division III level, where the student-athletes may not have been training as avidly as student-musicians who gain entrance to the most selective postsecondary music schools in the country. We need more data.

Where do we go from here? Studies confirming these findings will be very important. In the future,

as mentioned earlier, it would be wonderful to follow a group of elite high school musicians (e.g., from a performing arts high school or regional youth orchestra) during the transition into college. Measuring the occurrence of symptoms, time lost from practice/rehearsal/performance, and care-seeking behavior simultaneously would be very powerful. Following these students through their college years would allow us to determine the extent to which having had problems before college increases the risk of having problems during college. By prospectively collecting data on the risk factors included in Dr. Brandfonbrener’s study along with others, we might have a better chance of determining why some instrumentalists have pain, miss one or more days of practice, and/or see a health care professional for help with a problem.

In the meantime, we can all thank Alice for making yet another important contribution to the performing arts medicine knowledge base.

RALPH A. MANCHESTER, MD
Rochester, New York
rmanchester@uhs.rochester.edu

1. Brandfonbrener AG: History of playing-related pain in 330 university freshman music students. *Med Probl Perform Art* 2009; 24(1):23–29.
2. Fry HJH, Ross P, Rutherford M: Music-related overuse in secondary schools. *Med Probl Perform Art* 1988; 3(4):133–134.
3. Lockwood AH: Medical problems in secondary school-aged musicians. *Med Probl Perform Art* 1988; 3(4):129–132.

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