

Předseda oborové rady Experimentální chirurgie  
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**Opponent's review of the doctoral dissertation MUDr. Azzat Al-Redouan on the topic:**

***Scapular region topography concerning peripheral nerves and  
anatomical implication of nerve entrapment***

**1. Choice of topic**

The topic of the dissertation shows the possibilities of contemporary anatomical research, its connection with imaging methods and clinical output.

From an orthopedic point of view, the section devoted to ultrasound examination, which is experiencing a renaissance in our field and is increasingly used, is particularly interesting. Also, knowledge of the anatomical structures around the suprascapularis nerve can improve the results of its surgical release.

**2. Formal evaluation of the dissertation**

The submitted dissertation is 108 pages long and contains all the prescribed parts in a balanced manner. It is divided into an introductory and an experimental part.

Hypotheses, results and their meaning are formulated in an understandable way, including benefits for clinical practice and the possibility of further research.

I appreciate the overall processing of the work, the clear stratification and construction of the text, the excellent visual documentation, the clear tables and above all the critical discussion.

I consider the number of similar abbreviations that make some parts of the text unclear and are also used differently in the visual documentation to be minor formal shortcomings of the work.

### **3. Content evaluation of the dissertation**

In the *introductory part*, the author summarizes current anatomical findings of the upper part of the scapula and adjacent soft structures. Hypotheses and the design of the experimental part are subsequently derived from the summary.

The *experimental part* is divided into terminological deficiencies, osteology and cadaveric observations and their comparison with imaging methods.

Both parts are comprehensively processed in terms of content, and most of the questions that readers have are subsequently answered. Methodological elaboration, file sizes of individual methods are sufficient for the conclusions drawn, which are appropriately discussed with clear conclusions for both anatomical and clinical needs

### **4. Benefits of the work**

The dissertation very nicely synthesizes the anatomical, radiological and clinical possibilities of research on the area of the upper part of the scapula. The set methodology and the level of all parts of the work will allow very fast outputs and research on other anatomical areas.

### **5. Conclusion**

**I evaluate MUDr. Azzat Al-Redouan's doctoral dissertation as *as excellent and I definitely recommend it for approbation. Upon successful defense, the Ph.D. degree may be awarded according to § 47 Zákona o vysokých školách č. 111/98 Sb.***

*Last but not least, it is necessary to mention the large number and quality of research outputs, whether journal or congress.*

### **Questions for the author:**

- 1) What was the position of the scapulae at the suprascapular notch measurements? (Fig. 7 and 8)
- 2) Is ultrasound guided SSN intervention with anterior probe approach safe? And which side of the probe is anatomically more suitable for needle insertion?

In Prague, 18th August 2024

doc. MUDr. Michal Tuček, Ph.D.

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