

EDUCATIONAL AND METHODOLOGICAL COMPLEX OF DISCIPLINE
MiF1202 «Morphology and human physiology»
Course – 1 Semester – 2
Number of credits – 12
Almaty 2022

Lecture 14 The muscular system VI

Muscles Acting on the Leg and foot

Outcomes:

1. Name and locate the muscles that act on the ankle, and toe joints; and Relate the actions of these muscles to the joint movements;
2. Identify the muscles from model or diagrams.

The muscles of the leg that move the foot and toes are divided into anterior, lateral, superficial- and deep-posterior compartments. The anterior compartment includes the tibialis anterior, the extensor hallucis longus, the extensor digitorum longus, and the fibularis (peroneus) tertius. The lateral compartment houses the fibularis (peroneus) longus and the fibularis (peroneus) brevis. The superficial posterior compartment has the gastrocnemius, soleus, and plantaris; and the deep posterior compartment has the popliteus, tibialis posterior, flexor digitorum longus, and flexor hallucis longus.

Review questions

1. Identify the muscles of from model or diagram: extensor digitorum longus, and flexor hallucis longus.
2. Which muscles act on the toes and what is their action?

Basic literature:

1. Saladin, Kenneth S: Essentials of Anatomy & Physiology. (2018, McGraw-Hill Education)
1. Costanzo, Linda S.: BRS Physiology. Board Review Series. 7 edition. - Wolters Kluwer Health, 2018. - 307p. - ISBN 1496367693, 9781496367693
2. Leslie P. Gartner: Color Atlas and Text of Histology. - 7th Edition. - Wolters Kluwer, 2017. ISBN 1496346734, 9781496346735
3. Russell K. Hobbie, Bradley J. Roth: Intermediate Physics for Medicine and Biology. - Springer, 2015. - ISBN 3319126822, 9783319126821
4. Andersson D, Medical Terminology: The Best and Most Effective Way to Memorize, Pronounce and Understand Medical Terms: Second Edition, ISBN-13 : 978-1519066626, 2016