lar syndrome who underwent MRI examination of the lumbar spine were included in the study. These patients were separated in two groups. Study group comprised 29 patients who presented with osseus fusion LSTV; 14 patients with bilateral osseus and 15 of them with combined fusion LSTV type. Forty six patients without LSTV were added randomly and referred to as the control group.

Results and Discussion. There were significantly more disc herniations (86%, 87% vs 59.4%, p=0.05) and more severe cauda equine compression (14%, 20% vs 3%, p=0.009, p=0.01) at the level that assumes the role of lumbosacral junction in bilateral osseus and combined fusion group each compared to the control group. At the adjacent proximal level less disc herniations (50%, 53% vs 55.7%) but more severe cauda equina compression (36%, 27% vs 21%) was observed in both LSTV groups, each compared to the control group.

Conclusions. In conclusion, altered morphology and biomechanics in osseus fusion LSTV types provoke disc herniations and severe cauda equina compression to occur more frequently proximal to the level of transition.

SMALL GROUP LEARNING METHOD STIMULATES STUDENT'S INTEREST FOR NEW COGNITIONS IN HISTOLOGY AND EMBRYOLOGY

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Key words: *students, study guide, small group learning, questionnaire, cognition, elaboration*

Aim. To compare «small group learning» method with traditional «teacher centered learning» and assess whether it further stimulates student's interest for new cognition.

Material and Methods. Classes of human Histology & embryology; First semester: traditional (teacher centered) learning; Second semester: Small group learning method; Subject of analysis: students' answers from identical questionnaires asking to: identify types of information given in the Study guide; state new cognition gained from H&E classes; report whether home review was undertaken (answering questions by elaborating on newly adopted knowledge).

Results and Discussion. In teacher centered learning, different types of information from the study guide were identified by 36.4% of students. Skill acquiring was recognized by 1.4%. Concrete statements of new cognition were given by only 9.2%. Interest in answering questions by elaborating on newly adopted knowledge was reported by 2%. With small group learning method, different types of information from the study guide were identified by 54% of students. Skill acquiring was recognized by 5.5%. Concrete statements of new cognition were given by 36.1%. Interest in answering questions by elaborating on newly adopted knowledge was reported by 19.7% of students.

Conclusions. Introducing the «small group method» notably increases the number of students who use the study guide for better informing; are able to specifically state newly adopted facts; consistently try «home review» by elaborating on newly adopted knowledge.

HOMEPAGE TO DISTRIBUTE THE ANATOMY LEARNING CONTENTS INCLUDING VISIBLE KOREAN PRODUCTS, COMICS, AND BOOKS

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Key words: *internet, learning, anatomy, visible human projects, cartoons, books*

The authors have operated the homepage (anatomy.co.kr) to provide the learning contents of anatomy. From the homepage, sectioned images, volume models, and surface models — all Visible Korean products — can be downloaded. The realistic images can be interactively manipulated, which will give rise to the interest in anatomy. The various anatomy comics (learning comics, comic strips, plastination comics, etc.) are approachable. Visitors can obtain the regional anatomy book with concise contents, mnemonics, and schematics as well as the simplified dissection manual and the pleasant anatomy essay. Medical students, health allied professional students, and even laypeople are expected to utilize the easy and comforting anatomy contents. It is hoped that other anatomists successively produce and distribute their own informative contents.

NEW INSIGHTS OF THE ZYGOMATICUS MINOR MUSCLE CONNECTING THE ORBITAL AND MOUTH REGIONS: ITS ARRANGEMENT AND ATTACHMENTS

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Key words: *mouth, orbital region, electromyographic analyze, muscles*

Aim. The present study aimed to investigate the arrangement and terminal attachments of the zygomaticus minor muscle (Zmi) fibers connecting the orbital and mouth regions.

Material and Methods. The Zmi was examined in 32 specimens of embalmed Korean adult cadavers.

The Zmi fibers were traced to observe their arrangement and attachments.

Results and Discussion. The Zmi was formed by the muscle fibers that arose from the zygomatic bone and the muscle fibers that extended from the orbicularis oculi muscle (OOc) in 96.9%. When the Zmi inserted into the upper lip, ithad more muscle fibers from the OOc than the zygomatic bone in 31.3%, and from the zygomatic bone than the OOc in 50.0%. Amounts of the Zmi fibers from the zygomatic bone and the OOc were similar in 15.6%. In 93.8%, the muscle fibers that extended from the OOc constituted the lateral margin of the Zmi, usually descending to the level between the nasal ala and the vermilion border of the upper lip and inserting into the upper lip. Some of the Zmi fibers that arose from the zygomatic bone blended with the inferior fibers of the OOc in 40.6%, and they constituted the inferior and medial margins of the OOc.

Conclusions. The data regarding the arrangement and attachments of the Zmi fibers connecting the orbital and mouth regions will be useful for electromyographic analyses, botulium toxin type A therapies, and various facial surgeries.

ANATOMICAL FEATURES OF THE INCISIVUS LABII SUPERIORIS MUSCLE AND ITS RELATIONSHIPS WITH THE UPPER MUCOLABIAL FOLD, LABIAL GLANDS AND MODIOLAR AREA

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Key words: *face, maxillofacial area, facial muscles, spatial relationships, incisivus labii superioris muscle*

Aim. The current study examined the incisivus labii superioris muscle (ILS) and its morphologic and spatial relationships with the surrounding structures, especially focusing on the upper mucolabial fold, labial glands, and modiolar area.

Material and Methods. ILSs were investigated in 52 specimens from embalmed Korean adult cadavers.

Results and Discussion. ILSs were observed in all specimens (100%). The ILS had an oblique and linear origin. The ILS originated from the incisive fossa of the maxilla to the point just medial to the origin of the levator anguli oris muscle (LAO). The medial arising fibers of the ILS curved upward and laterally. The ILS was located between the orbicularis oris muscle (OOr) and the LAO with fan shape. As the ILS coursed arching laterally, it became the superolateral margin of the OOr, enlarging the dimension of the superior peripheral part of the OOr. The arising fibers of the ILS arched and covered the prominent labial glands at the superior margin of the OOr. After the ILS coursed laterally along the anterior part of the upper mucolabial fold, the ILS was divided into the superficial or deep inserting fibers in most specimens. The superficial inserting fibers of the ILS blended with the medial fibers of the LAO to converge toward the modiolus. The deep inserting fibers of the ILS blended with several muscles in the modiolar area.

Conclusions. These specific results will be helpful for analyzing the movements of the mouth and performing various facial surgeries.

CLINICAL-ANATOMIC MAPPING OF THE TARSAL TUNNEL WITH REGARD TO BAXTER'S NEUROPATHY IN RECALCITRANT HEEL PAIN SYNDROME — PART I

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Key words: *baxter nerve, ultrasound, heel pain syndrome, tarsal tunnel*

Aim. To describe the topographic anatomy of the tibial nerve (TN) and its branches in relation to their osteofibrose chambers in the proximal and distal postero-medial tarsal tunnels, with ultrasonographic injection procedures proof of the Baxter nerve (BN).

Material and Methods. 41 alcohol-glycerin embalmed feet were dissected. We documented the pattern of the branches of the TN and describe all relevant osteofibrose structures. Measurements for the TN branches were related to the Dellon-McKinnon Malleolar-Calcaneal Axis (DML) for the proximal TT and the Heimkes Triangle for the distal TT. Additionally we performed an ultrasound guided injection procedure of the BN and provide an algorithm for clinical usage.

Results and Discussion. The division of the TN was 16.4 mm proximal to the DML. The BN branches