318.973 mm^3, Percent bone volume: Bone volume/Tissue volume: %44.93±5.859, Bone surface: 12149.25±3738.144 mm^2, Bone surface/volume ratio: 10.78±2.006 mm-1, Trabecular number: 1.31±0.150 mm-1, Trabecular thickness: 0.35±0.056 mm, Trabecular seperation: 0.57±0.087 mm, Structure model index: -0.12±0.638, Degree of anisotropy: 1.30±0.093.

Conclusion: When compared with other carpal bone studies regarding bone strenght it seems that hamate is a stronger bone related with its trabecular thickness and number but a weaker bone in relation to its trabecular seperation among other carpal bones.

Keywords: trabecular structure, hamate bone, micro-CT

O-054

An investigation of oesophageal strictures, esophageal hiatus and oesophagogastric junction localizations related to age and gender

Karaca Bozdağ Z[1], Bozdağ E[2], Kürkçüoğlu A[3], Pamukcu A[4], Bozkurt H[5], Senger AS[5]

[1]Department of Anatomy, School of Medicine, Istanbul Yeni Yüzyıl University, Istanbul, Turkey; [2]Department of Gastroenterology, Kanuni Sultan Süleyman Training and Research Hospital, Sağlık Bilimleri University, Istanbul, Turkey; [3]Department of Anatomy, School of Medicine, Başkent University, Ankara, Turkey; [4]Department of Business Administration, Land Forces NCO Vocational High School, Milli Savunma University, Balıkesir, Turkey; [5]Department of Gastroenterology, Kartal Koşuyolu Yüksek İhtisas Training and Research Hospital, Health Sciences University, Istanbul, Turkey

Objective: The objective of this study was determining anatomic localizations of oesophageus strictures, oesophageal hiatus and oesophagogastric junction according to age and gender in patients undergoing upper gastrointestinal system endoscopy.

Methods: Images of patients who underwent upper gastrointestinal system endoscopy in Kartal Koşuyolu Hospital between 2018–2019 were reviewed retrospectively in this study. Nine patients with cancer were excluded. Relation of anatomic localizations of hiatus oesophageus, oesophagogastric junction and cervical oesophageus with age, sex and clinical diagnosis was investigated on endoscopy data.

Results: Of the 298 patients who underwent upper gastrointestinal endoscopy for different indications, 175 were female and 123 were male. 7% of patients were younger than 35 years, 19.1% were 35–44 years, 24.2% were 45–54 years, 27.5% were 55–64 years and 22.1% were 65 years old and over. Mean lengths of oesophageal hiatus, oesophagogastric junction and cervical oesophageus were 38.61±2.23 mm, 37.5±2.23 mm and 15.06±0.57 mm, respectively. Length of oesophageal hiatus, oesophagogastric junction and cervical oesophageus were significantly higher in males than females (p=0.001). No statistically significant difference was observed between the age groups as regards endoscopic data (p>0.05).

Conclusion: Endoscopy is accepted as the gold standard in diagnosis of upper gastrointestinal system diseases and is easily performed. Although the anatomical localization of oesophageus strictures, oesophageal hiatus and oesophagogastric junction which we present with this method is important to prevent complications during this procedure, we think that it will also be helpful in determining hiatal hernia and insufficiencies.

Keywords: endoscopy, oesophageal hiatus, oesophagogastric junction, oesophagus, oesophageal structures

O-055

Effect of chloroquine in chronic hypoxia-induced bowel damage

Kaymak E[1], Akin AT[2], Yalçın B[1], Öztürk E[1], Ceylan T[4], Başaran KE[4], Karabulut D[3], Doğanyiğit Z[1], Özdamar S[5], Yakan B[3]

[1]Department of Histology and Embryology, School of Medicine, Yozgat Bozok University, Yozgat, Turkey; [2]Department of Biology, School of Medicine, Erciyes University, Kayseri, Turkey; [3]Department of Histology and Embryology, School of Medicine, Erciyes University, Kayseri, Turkey; [4]Department of Physiology, School of Medicine, Erciyes University, Kayseri, Turkey; [5]Department of Histology and Embryology, School of Medicine, Pamukkale University, Denizli, Turkey

Objective: Hypoxia seriously stimulates intestinal barrier damage and forms an inflammatory response. Chloroquine is an antimalarian drug. The aim of this study was to investigate the anti-inflammatory effect of chloroquine on intestinal injury in chronic hypoxia-induced rats.

Methods: In this study, 24 8–12 week old adult Wistar albino rats weighing 150–200 gr were used in Erciyes University Experimental and Clinical Research Center (DEKAM). A total of 24 rats (8 rats) were used for each group. The control group (n=8) was kept under normoxia (21% oxygen) for 28 days. Hypoxia (n=8, 10% oxygen) and hypoxia + chlorokine (n=8, 10% oxygen + chlorokine 50 mg/kg/day) were exposed to 10% chronic hypoxia for 28 days.TNF-alpha antibody in 5–6 µm thick sections from paraffin blocks. Each preparation was randomly scored in 5 areas according to the intensity of staining. This scoring; 0: no staining, 1: less staining, 2: moderate staining, 3: intense staining. The results were evaluated in the SPSS statistical package program. P<0.005 was considered significant.

Results: When immunohistochemical results were evaluated, the intensity of TNF-α in intestinal tissue in hypoxia group increased significantly compared to control group. In hypoxia + chloroquine group, the TNF-α concentration in intestinal tissue showed a statistically significant decrease compared to the hypoxia group.

Conclusion: These results show that the inhibition of chlorokine on TNF-α and its antiinflammatory effect on chronic intestinal hypoxia induced experimental bowel damage has been shown to reduce bowel damage.

Keywords: hypoxia, bowel, inflammation