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Tomic S, Pekic V, Popijac Z, Pucic T, Petek M, Kuric TG, Misevic S, Kramaric RP. What increases the risk of malnutrition in Parkinson's disease? J Neurol Sci. 2017;375:235-238.

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Parkinson's disease (PD) patients are at a higher risk of malnutrition. The prevalence has been estimated to 0-24%, while 3%-60% of PD patients are reported to be at risk of malnutrition. To date, there is no clear explanation for malnutrition in these patients. The aim of this study was to determine the prevalence of malnutrition and to analyze factors that influence its appearance. The Mini Nutritional Assessment (MNA) was used to determine normal nutritional status; at risk of malnutrition; and already malnourished status. The Unified Parkinson's Disease Rating Scale (UPDRS) parts III and IV, Hoehn and Yahr scale (H&Y scale), Beck Depression Inventory (BDI), Mini Mental State Examination (MMSE), Questionnaire for Impulsive-Compulsive Disorders in Parkinson's Disease-Rating Scale - eating part (QUIP-RS) and Mini Nutritional Assessment (MNA) were used to evaluate the factors affecting patient nutritional status. Out of 96 patients, 55,2% were at risk of malnutrition, while 8,3% had already been malnourished. Age, H&Y scale, UPDRS part III, 'off' periods and depression influence negatively on MNA. More patients with 'off' periods were rigor dominant. Thyroid gland hormone therapy was related to malnutrition, while patients with normal nutritional status used ropinirole more often than pramipexole. Factors affecting nutritional status are age, motor symptoms and stage severity, 'off' states, rigidity dominant type with 'off' states, and thyroid hormone replacement therapy. Ropinirole exhibited the possible 'protective' effect against malnutrition.

Bago Rožanković P, Rožanković M, Vučak Novosel L, Stojić M. Nonmotor symptoms in de novo Parkinson disease comparing to normal aging. Clin Neurol Neurosurg. 2017;155:7-11.

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OBJECTIVE: Nonmotor symptoms (NMSs) are common in Parkinson disease (PD), affecting patient's quality of life. The prevalence and domains of NMSs in untreated de novo PD remains unclear, especially comparing to normal aging. The objective was to determine NMSs in untreated de novo PD patients. PATIENTS AND METHODS: We performed a cross-sectional study to evaluate the frequency and severity of NMSs in untreated de novo PD patients (n=71) and age-matched normal controls (n=60) using the Non-Motor Symptoms Scale (NMSS). The motor section of the Unified Parkisnon Disease Rating Scale (mUPDRS) and the Hoehn and Yahr (HY) stage were also obtained in PD patients RESULTS: The number of NMSs and the NMSS scores were significantly higher in the PD patients than in controls (p<0.001). There was no correlation of the NMSS scores with age and sex in both group and additionally with mUPDRS score and HY stage in PD patients group. Mood/cognition, attention/memory and gastrointestinal domains are the most frequent in PD patients and rarely seen in controls. CONCLUSION: NMSs in untreated de novo PD patients are more prevalent and severe with different domain involvement comparing to normal aging.

Mladina R[1], Antunović R[2], Cingi C[3], Bayar Muluk N[4], Skitarelić N[5]. Sinus septi nasi: Anatomical study. Clin Anat. 2017;30:312-317.

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The aim of this study was to perform a pioneering investigation into the incidence of pneumatization in human skulls. A total of 93 human skulls (≥20 years of age, 69 males, 24 females) were included in the study. The skulls were scanned in a fixed position using cone beam computed tomography (CBCT). The pneumatized space parameters within the nasal septum-width, length, and height-were measured. Two types of finding were identified: (a) Pneumatization, named "sinus septi nasi" (SSN), and (b) "spongy bone" (SB). The results showed SSN in 32 of the 93 skulls (34.4%). The SSN formations were from 0.5 to 4.2 mm wide, 3.5 to 18.8 mm long, and 3.8 to 17.7 mm high. Tumefactions filled with SB were found in 61 of the 93 skulls (65.59%). These were not suitable for precise measurements since the outer borders were not strictly and well defined on CT scans (perhaps because of the preparation process). In conclusion, the perpendicular plate of the ethmoidal bone is not always compact bone; in 34.4% of cases, it shows a degree of pneumatization. In contrast, an enlarged formation filled with SB is present in 65.59% of cases. The possible sources of pneumatization of this little-investigated region are discussed: sphenoid sinus, frontal sinus, and vomeronasal organ.

Krstičević M[1], Jerić M[2], Došenović S[3,4], Jeličić Kadić A[4,5], Puljak L[6]. Proliferative injection therapy for osteoarthritis: a systematic review. Int Orthop. 2017;41:671-679.

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PURPOSE: To systematically analyse randomised controlled trials (RCTs) about efficacy and safety of proliferative injection therapy (prolotherapy) for treatment of osteoarthritis (OA). METHODS: CENTRAL, Embase and MEDLINE were searched. Two reviewers independently conducted screening and data extraction. RCTs were assessed with the Cochrane risk of bias tool. Type of treatment, study design, dosing, efficacy outcomes and safety outcomes were analysed. The protocol was registered in PROSPERO (CRD42016035258). RESULTS: Seven RCTs were included, with 393 participants aged 40-75 years and mean OA pain duration from three months to eight years. Follow-up was 12 weeks to 12 months. Studies analysed OA of the knee joint (n = 5), first carpometacarpal joint (n = 1) and finger joints (n = 1). Various types of prolotherapy were used; dextrose was the most commonly used irritant agent. All studies concluded that prolotherapy was effective treatment for OA. No serious adverse events were reported. The studies had considerable methodological limitations. DISCUSSION: Limited evidence from low-quality studies indicates a beneficial effect of prolotherapy for OA management. The number of participants in these studies was too small to provide reliable evidence. CONCLUSIONS: Current data from trials about prolotherapy for OA should be considered preliminary, and future high-quality trials on this topic are warranted.

Klobučar M[1], Visentin S[1], Jakovčević A[2], Bilić M[2], Kovač-Bilić L[2], Đanić D[3], Pavelić K[1], Kraljević Pavelić S[1]. Expression of polysialic acid in primary laryngeal squamous cell carcinoma. Life Sci. 2017;173:73-79.

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AIMS: Expression of polySia is associated with metastatic dissemination and progression of various malignant diseases. In particular, it may contribute to tumorigenesis by a negative modulatory effect on cellular signal-

ing cascades responsible for cellular migration, differentiation and proliferation. In this study, we investigated the expression of polySia in primary metastatic and non-metastatic laryngeal squamous cell carcinoma (LSCC) tumor tissues and its potential impact on the LSCC progression. MAIN METHODS: The expression of polySia in metastatic and non-metastatic primary laryngeal squamous cell carcinoma (LSCC) tumor biopsy specimens was investigated by immunohistochemistry, while the expression of polysialyltransferase IV (ST8SiaIV)(), fibroblast growth factor receptor 1 (FGFR1), extracellular signal regulated kinases 1 and 2 (Erk 1/2) and c-Raf was tested in metastatic and non-metastatic primary tumor tissues (including the corresponding non-tumor control tissues) by Western blot analysis. KEY FINDINGS: The expression of polySia was detected in LSCC biopsies specimens with generally stronger immunoreactivity in non-metastatic tumor LSCC sections and in histologically undifferentiated tumors. Also, increased polySia expression was observed in adjacent histologically unaltered laryngeal tumor-associated tissue of the metastatic sections. In addition, we provide an evidence of increased polysialyltransferase IV (ST8SiaIV) expression, involved in polySia synthesis in both metastatic and non-metastatic primary tumors which is accompanied by decreased levels of FGFR1, Erk 1/2 and c-Raf. SIGNIFICANCE: We present for the first time the evidence for the polySia expression in LSCC biopsies specimens which suggests its potential impact on initial steps of LSCC malignant transformation.

Kubat O, Bojanić I, Smoljanović T. Localized pigmented villonodular synovitis of the ankle: Expect the unexpected. Foot Ankle Surg. 2017;23:68-72.

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BACKGROUND: We present the technique, results and discuss arthroscopic treatment of the localized form of pigmented villonodular synovitis (LPVNS) of the ankle. METHODS: Medical records of five patients diagnosed and treated for ankle LPVNS with a minimum five-year followup were retrospectively reviewed. All patients were treated arthroscopically, altered synovial tissue was resected and a sample of tissue was sent for pathohistological examination for the definitive diagnosis. RESULTS: No recurrence was noted at a mean followup of 6.5 years, both clinically and by MRI at one year postoperatively. Patients were evaluated using the American Orthopaedic Foot and Ankle Society (AOFAS) Ankle-Hindfoot score, and an improvement was noted from an average score of 65.6 prior to treatment to 94.6 at final followup. CONCLUSION: Considering the results of this case series, and the absence of complications, arthroscopy is a viable option for treating LPVNS of the ankle.

Rustemović N, Kalauz M, Grubelić Ravić K, Iveković H, Bilić B, Ostojić Z, Opačić D, Ledinsky I, Majerović M, Višnjić A. Differentiation of Pancreatic Masses via Endoscopic Ultrasound Strain Ratio Elastography Using Adjacent Pancreatic Tissue as the Reference. Pancreas. 2017;46:347-351.

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OBJECTIVES: The aims of this study were to evaluate diagnostic value of endoscopic ultrasound strain ratio elastography in patients with focal pancreatic masses and to determine the cutoff value between the pancreatic malignancies and inflammatory pancreatic masses using reference areas different than those used by other investigators. METHODS: In a prospective single-center study, strain ratio was measured in patients with pancreatic masses. After the diagnosis was established, statistical analysis was used to compare the group with pancreatic malignancies to the one with inflammatory masses. RESULTS: Strain ratio cutoff of 7.59 provided 100% sensitivity, 95% specificity, and 97% overall accuracy for differentiation of patients with pancreatic malignancies from those with inflammatory masses. CONCLUSIONS: Our data show high sensitivity and specificity for the calculated strain ratio. Adjacent normal pancreatic tissue is adequate as a reference area based on the inclusion criteria. Diverse cutoff values and standardization of methods in the studies published so far require further investigations, before the implementation of the method in a routine clinical practice becomes possible.

Bojanic K[1,2] Katavic N[1], Smolic M[2,3], Peric M[4], Kralik K[5], Sikora M[6], Vidačić K[1], Pacovski M[1], Stimac D[7], Ivanac G[8]. Implementation of Elastography Score and Strain

Ratio in Combination with B-Mode Ultrasound Avoids Unnecessary Biopsies of Breast Lesions. Ultrasound Med Biol. 2017;43:804-816.

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The aim of this study was to evaluate whether the combination of B-mode ultrasound, elastography score (ES) and strain ratio (SR) improves diagnostic performance with respect to breast lesions. One hundred thirty lesions were prospectively evaluated by B-mode ultrasound and strain elastography, followed by fine-needle aspiration cytology/biopsy in 117 woman who were scheduled for regular breast BUS. The median ES (4.5 vs. 2.9, $p < 0.001$) and SR (4.9 vs. 2.3, $p < 0.001$) were significantly higher for malignant than for benign lesions. A sensitivity of 90.5% and specificity of 93.2% for the ES (cutoff point = 3.8) and a sensitivity of 87.5% and specificity of 87.6% for the SR (cutoff point = 3.5) were obtained. Elastography combined with B-mode ultrasound improved the specificity, accuracy and positive predictive value. Receiver operating characteristic curves yielded a higher value for the combined technique for diagnosis of breast lesions. Routine use of such a diagnostic algorithm could reduce the number of unnecessary biopsies.