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Does AI replace medical doctors?

The rapid development of artificial intelligence (AI) and AI-related functions significantly influences our understanding of medicine, shifting it from a service-oriented approach towards patients to a knowledge-driven decision-making process. A critical question that remains is where the boundary lies between AI and human doctors and whether pure knowledge can adequately replace empathy and the patient-physician relationship.

An excellent example of how advanced techniques can assist in the medical care process is illustrated in the first paper of this issue, authored by Krzyżańska et al. Their meta-analysis, which includes 17 meticulously selected studies, aims to provide a comprehensive overview of the effectiveness of robot-assisted gait training (RAGT) therapy in improving total gait distance and functional status among individuals with cerebral palsy. The results of this meta-analysis clearly demonstrate that RAGT is a valuable tool for enhancing the effectiveness of physiotherapy and should potentially be considered for more patients with cerebral palsy [1].

Within the realm of neurological disorders, this edition of the rheumatology forum features an intriguing paper from Poznan that delves into feeding problems and temporomandibular dysfunction in children with cerebral palsy [2]. It is crucial to recognize that the act of eating engages more than 30 nerves that must operate in concert and with precision. Similarly, the process of swallowing is intricate, and any disruption in central nervous system function directly compromises these critical processes. Additionally, attention must be given to various other factors influencing proper feeding, such as posture, saliva management, head and neck positioning, respiratory function, and potential dental issues.

Therefore, addressing feeding dysfunction in children with cerebral palsy necessitates a comprehensive approach and the involvement of well-coordinated multidisciplinary teams who maintain clear communication with families.

The evolution of rheumatology is clearly illustrated in the next paper by Wiąg-Walerowicz and Wielosz [3]. The authors focus on axial spondyloarthritis, a group of inflammatory arthropathies traditionally managed with non-steroidal anti-inflammatory drugs (NSAIDs) and physiotherapy. Currently, several biologic agents are available that can significantly improve disease outcomes. Unfortunately, the diagnostic process remains lengthy, resulting in unnecessary delays. This issue persists globally, even in countries with highly efficient healthcare systems. The delay between the onset of symptoms and the official diagnosis of axial spondyloarthritis (axSpA) remains a significant issue in the medical community. On average, this delay spans approximately 6.7 to 8.5 years globally. This prolonged diagnostic period is attributed to various factors, including the difficulty in distinguishing inflammatory back pain from more common mechanical back pain, leading to frequent misdiagnoses in primary care settings.

Sikorska and Samborski contributed to the next paper in this issue. Methotrexate, a cornerstone drug in rheumatology, demonstrates efficacy across various indications. One of the limiting factors for methotrexate (MTX) is its reduced bioavailability, typically plateauing at absorption rates around 15 mg/week. This limitation can be effectively addressed by optimizing administration methods. Subcutaneous administration ensures linear absorption, enabling the attainment of higher therapeutic drug concentrations,

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thereby directly enhancing therapeutic outcomes. The authors conducted a comparative analysis of all available subcutaneous methotrexate preparations in Poland, evaluating properties such as concentration, viscosity, and administration comfort [4].

Modern rheumatology intersects significantly with other medical specialties, particularly neurology. A considerable number of patients with connective tissue diseases also experience involvement of the central and peripheral nervous systems, commonly manifesting as peripheral neuropathy. Gumkowska et al. [5] comprehensively discuss various presentations of peripheral neuropathy and their potential association with the development of connective tissue diseases. The paper also provides a detailed exploration of peripheral neuropathies in specific connective tissue diseases such as primary Sjogren syndrome, systemic lupus erythema-

tosus, systemic vasculitides, cryoglobulinemia, and systemic sclerosis.

A significant aspect of this paper is its treatment subchapter, which examines available therapeutic options. It is anticipated that this paper will attract considerable scientific interest by bridging the gap between neurological and rheumatological perspectives on these diseases.

The final paper in this summer's issue of Rheumatology Forum presents a case report detailing severe bone loss in a premenopausal woman [6]. The paper meticulously explores the kidney-bone axis, highlighting compromised kidney function and secondary hyperparathyroidism as factors contributing to calcium-phosphorus imbalance and consequent severe bone demineralization. While such phenomena are recognized within this association, it is noteworthy to consider their underlying implications in specific rheumatic presentations.

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