SAŽETCI	ABSTRACTS

POZVANA PREDAVANJA / *INVITED LECTURES*

BEHÇET DISEASE MANAGEMENT

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Behçet disease (BD) is a chronic inflammatory disease predominantly affecting small vessels and sharing features with autoinflammatory and autoimmune disorders. The 2012 Revised International Chapel Hill Classification of Vasculitis listed BD as a variable vessel vasculitis. BD is defined as systemic neutrophilic vasculitis with recurrent oral and genital aphthous ulcers, uveitis, and skin lesions. No specific pathogens and autoantibodies have been associated the disease development. Clinical manifestations may resemble those of spondyloarthritides and neutrophilic disorders. Colchicine may have beneficial effects in females, those with mild BD, and joint involvements. Diagnosis is based on the International Study Group for BD (1990) and the International Criteria for BD (ICBD, 2014) with more sensitivity (94% vs 81%) and less specificity (92% vs 96%).

There are scarce evidence-based reports to treat BD patients. Most publications are case studies, descriptive analyses, and opinion pieces. Common topics in connection with BD are colchicine, thrombosis, aneurysms, infliximab, neutrophil, HLA-B51, adalimumab, etanercept, interleukin-1, anakinra, and canakinumab. The revised 2018 EULAR guidelines are widely used to guide the BD management. Available Cochrane systematic reviews do not provide strong recommendations for first-line therapies and point to low quality of outdated clinical trials. Most reports on BD have not been thoroughly promoted on social media and have attracted limited citations.

Several online surveys have been arranged during the COVID-19 pandemic to clarify the changes in the management of BD and safety of related vaccines. The surveys have suggested that smoking status could have a protective effect and that discontinuation of immune suppressive therapies increased the frequency of BD flares. The surveys have not favoured colchicine and supported the use of mRNA vaccines for lasting protection against the novel coronavirus.

Analysis of available data justifies new surveys and trials to explore approaches to BD management and first-line therapies.

Keywords: Behçet disease, autoinflammation, colchicine, cytokines, case reports, clinical trials, online surveys, COVID-19, bibliometric and altmetric analyses.
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COVID-19 – GDJE SMO DANAS?

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Pandemija COVID-19 u posljednje tri godine predstavlja značajan medicinski problem sa popratnim socijalnim i ekonomskim posljedicama. COVID-19 je uzrokovan virusom SARS-CoV-2 koji pripada skupini RNA virusa. Radi se o brzo replicirajućem virusu koji napada brojne stanice u našem organizmu, poglavito epitelne, endotelne i živčane, čime uzrokuje oštećenja niza organskih sustava i brojne simptome. Virus snažno aktivira i deregulira imunosni sustav, čime dovodi do razvoja upalnih oštećenja tkiva što relativno često uzrokuje teške oblike bolesti i smrt. Mutacije u genomu virusa koje se pojavljuju zbog velikog broja replikacija i prirode virusa dovode do selekcije novih mutanti koje su infektivnije, ali na sreću još uvijek ne uzrokuju značajnije promjene u smislu veće patogenosti. One ipak predstavljaju problem i izazov za iznalaženje učinkovitih načina prevencije bolesti.

Pojava COVID-19 je uzrokovala mobilizaciju velikog dijela znanstvene i medicinske zajednice kako bi se upoznala biologija virusa i stvorila odgovarajuća cjepiva. Više nego ikada u povijesti bilo je vidljivo sinergijsko djelovanje znanosti, struke i farmaceutske industrije što je rezultiralo brojnim otkrićima i uspješnim generiranjem više različitih cjepiva diljem svijeta. Svjedoci smo upotrebe mRNA cjepiva, potpuno nove platforme cjepiva u humanoj upotrebi, koja će vjerojatno imati veću upotrebu u budućim cjepivima, ali i kao moguća genska terapija. Upotreba različitih cjepiva je značajno doprinijela smanjenju teških oblika bolesti i smrti u osjetljivim skupinama ljudi. U ovom radu ću dati pregled dosadašnjih saznanja i nekih vlastitih spoznaja o biologiji virusa, imunološkom odgovoru na virus, razvoju novih cjepiva i perspektivi borbe sa COVID-19.

Ključne riječi: COVID-19, SARS-CoV-2, biologija virusa, imunološki odgovor, cijepljenje
Izjava o sukobu interesa: Nema sukoba interesa

DIAGNOSIS OF AXIAL SPONDYLOARTHRITIS – CHALLENGES AND PITFALLS

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The currently available imaging procedures have various possibilities to visualize or sometimes to predict the osteogenesis pathognomonic for axial spondylarthritis (axSpA). The individual imaging techniques of X-rays, computed tomography (CT) and magnetic resonance imaging (MRI) all have strengths and weaknesses in the diagnostics of axSpA. The generally easily available X-ray imaging rapidly provides information on the condition of large sections of the skeleton. In particular, it can depict the chronic stages with various structural alterations of the sacroiliac joint and syndesmophytes and ankylosis of the spine. The CT technique, which principally has the same contrast as X-rays, also shows pathological ossifications but without superimpositions, with better resolution of details and a higher dimensionality. The MRI technique has a superior soft tissue contrast so that acute inflammatory stages, such as bone marrow edema and erosion of the edges of vertebrae of the spine (shiny corners, Romanus lesions) or erosions and bone marrow edema of the sacroiliac joint are easily visible. Bony reconstruction processes can be visualized better in X-ray imaging and particularly in CT, which increases the evidential value of X-ray, CT and MRI techniques. The positions of conventional radiography and MRI are well-established in the diagnostic algorithm; however, low-dose CT of the spine is still in the experimental stage but the initial results look promising.

All this makes imaging being a crucial tool for contribution of both sensitivity and specificity in the diagnosis of axial spondylarthritis. In addition, clinical symptoms and examination findings contribute similarly to the diagnosis and go beyond classification. Examples could be situations where imaging is not positive or not possible but patients suffer from inflammatory back pain, arthritis, uveitis, CRP increase and are positive for HLA-B27. Such cases need to be taken similarly urgently into account in daily clinical practice when deciding for treatment allocation or treatment escalation. On the other hand, there is still, partly due to the high sensitivity of the MRI, a tendency to overdiagnosis due to different pitfalls.

All this data needs to be taken into account when rheumatologists are being consulted either directly by patients or for a second opinion.

Keywords: magnetic resonance imaging, bone stress, bone marrow edema, spondylarthritis
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