LR03

Myocarditis following COVID – 19 mRNA vaccine administration

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INTRODUCTION/OBJECTIVES: Development of effective vaccines marked the beginning of the end for COVID-19 pandemic. Even though they represent key factor in combatting the disease, adverse events were reported following the administration of Pfizer-BioNTech and Moderna mRNA vaccines and among them myocarditis. The aim of this review was to present key points of myocarditis following the administration of Pfizer-BioNTech and Moderna mRNA vaccines like: epidemiological characteristics, clinical features, investigation and treatment.
MATERIALS AND METHODS: In providing information PubMed and Google Scholar data from June 2021 to January 2022 was analyzed alongside UK Health Security Agency guidelines for clinical management of myocarditis.
RESULTS: The recent studies show that myocarditis is a very rare adverse event predominantly affecting young males under the age of 30 with time to onset of approximately seven days after receiving the second dose. The symptoms include: fever, lethargy, significant chest pain or discomfort, tachypnea, shortness of breath, pain while breathing, palpitations and syncope. Initial investigation's results show sinus tachycardia, arrhythmias, conduction delays or non-specific ST segment and T wave changes in a 12 lead electrocardiogram. The lab results show elevation of troponin and inflammatory blood markers' levels. Cardiac imaging results are consistent with the diagnosis of myocarditis. Myocarditis following immunization using mRNA vaccine is usually mild and self-limiting disease without the need for treatment, although avoiding exercise is recommended.
CONCLUSION: In conclusion, myocarditis as an adverse event should be considered in a differential diagnosis of recent-onset chest pain if vaccination exists in patient's history since not everything is acute coronary syndrome.

LR04

Rethinking the basics: the usefulness of Lasegue's sign in diagnosing intervertebral disc herniation; a literature review

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Keywords: Intervertebral Disc Herniation, Lasegue's sign, Physical Examination

INTRODUCTION/OBJECTIVES: Lasegue's sign, or straight leg raise test, is a well-known part of the physical examination of the musculoskeletal system. It is taught religiously in medical schools and textbooks all around the world in both physical examination classes and later in internal medicine and orthopedics. However, is it good enough in diagnosing intervertebral disc herniation? This review aims to find out.
MATERIALS AND METHODS: A search of the available literature was performed using the PubMed database, using the search term "Lasegue's sign". The search yielded 109 results, which were filtered to only include original research papers. Following the filtering process, 3 original research papers were deemed suitable for inclusion in this review.
RESULTS: Overall, the sensitivity of LS when compared to MRI is defeatingly low – 18.1%, however, when compared to other clinical tests, LS had a decent sensitivity of 77-83%. The interrater reliability of LS was shown to be 0.33, with a positive agreement proportion of only 33%. Among the clinical signs compared to LS, the slump test was shown to have a significantly better sensitivity when compared to LS (85.7% vs 28.6%) and the bell test, hyperextension test and crossed Lasegue's sign were all shown to have slightly to moderately better interrater reliability.
CONCLUSION: While Lasegue's sign can be a valuable tool in screening for herniated discs in patients with low back pain, it is certainly not the only nor the best option available and more effort should be invested into teaching students and medical practitioners about the other available clinical signs.