## **CM07**

## Evaluation of Quantipheron (QFN) SARS-CoV-2 in vaccinated and recovered individuals

Ana Horvat<sup>a</sup>, Marija Gomerčić Palčić<sup>b</sup>

- <sup>a</sup> School of Medicine, University of Zagreb
- <sup>b</sup> Sestre milosrdnice University Hospital Center, Zagreb

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Ana Horvat 0000-0003-1062-5306, Marija Gomerčić Palčić 0000-0002-6836-4447

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INTRODUCTION/OBJECTIVES: Quantipheron (QFN) SARS-CoV-2 is a new test in which lymphocytes involved in cell immunity, in fully heparinized blood, are stimulated by combination of antigens specific for SARS-CoV-2. QFN SARS-CoV-2 is interferon gamma release assay (IGRA).

MATERIALS AND METHODS: In this prospective study, conducted from December 2021 until January 2022 in University Hospital Center Sestre milosrdnice in Zagreb, we evaluated both the total antibody and T cell responses in a cohort of COVID-19 convalescents who were vaccinated with two doses compared to the individuals only vaccinated with two doses. Blood specimens were collected from 16 subjects at different time points after the COVID-19 vaccination (5 of them were PCR-confirmed convalescent individuals) to measure durability of humoral and cell-mediated immune response.

RESULTS: Interestingly 9 out of 16 vaccinated patients didn't have CD4+ and CD8+ T cell-mediated responses in SARS-CoV-2-vaccinated subjects and only one patient had no antibodies at all. 2 out of 5 patient who were convalescents also didin't have evidence of T cell responses.

CONCLUSION: Quantipheron (QFN) SARS-CoV-2 could be useful tool to assess who needs an extra dose of vaccination and is possibly under the risk of evolving severe disease.



## **CM08**

## The role of anterolateral ligament in anterior cruciate ligament reconstruction – plantaris tendon graft technique

Mario Josipović<sup>a</sup>, Josip Vlaić<sup>b</sup>, Jure Serdar<sup>a</sup>, Marko Šimunović<sup>c</sup>, Dinko Nizić<sup>d</sup>, Mislav Jelić<sup>a</sup>

- <sup>a</sup> Department of Orthopaedic Surgery, University Hospital Centre Zagreb, School of Medicine, University of Zagreb
- <sup>b</sup> Division of Paediatric Orthopaedic Surgery, Children's Hospital Zagreb
- <sup>c</sup> Department of Radiology, University Hospital Centre Zagreb, University of Zagreb School of Medicine
- <sup>d</sup> Department of Radiology and Ultrasound Diagnostics, Special Hospital for Pulmonary Diseases

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Mario Josipović 0000-0002-6096-2872, Josip Vlaić 0000-0001-6381-8684, Jure Serdar 0000-0003-0506-2190, Marko Šimunović 0000-0001-7689-6315, Dinko Nizić 0000-0002-0924-7048, Mislav Jelić 0000-0003-1806-1349

Keywords: anterior cruciate ligament, anterolateral ligament, graft, plantaris tendon

INTRODUCTION/OBJECTIVES: Anterior cruciate ligament (ACL) reconstruction is the principal treatment option in symptomatic patients with ACL rupture. Regardless of the technique utilised, ACL reconstruction alone could not always restore normal knee kinematics, especially rotational stability. Moreover, present techniques mostly use autografts such as hamstring tendons and additionally disrupt the knee biomechanics. The anterolateral ligament (ALL) of the knee has been recognised as an important structure in providing rotational knee stability. Concurrent reconstruction of ACL and ALL ligaments has proven superior in both clinical stability tests and subjective outcome scores. Using plantaris tendon as ALL graft, detrimental effects of harvesting two hamstring tendons are avoided.

MATERIALS AND METHODS: Symptomatic patients with ACL deficient knee that underwent concomitant ACL and ALL reconstruction using one hamstring tendon and plantaris tendon were evaluated. Anteroposterior and rotational knee laxity were evaluated as well as objective and subjective outcome scores.

RESULTS: Results showed marked reduction in anteroposterior and rotational knee laxity measured with Lachman and Pivot shift test. Outcome scores showed high rate of patient satisfactory and return to pre-injury level of activity.

CONCLUSION: PT autograft can be used for ALL reconstruction regardless of surgical technique utilised. Furthermore, it can be performed as single ALL reconstruction in cases of residual laxity after ACL reconstruction or as a combined ACL and ALL reconstruction in cases of primary and revision ACL surgery.