

O-104 Low SARS-CoV-2 positivity rate in women included in ART programs following the recommendations of the Spanish scientific societies on reproduction (SEF/ASEBIR)

D. Mataro¹, I. Cuevas-Saiz², J.A. Castilla³, J.A. Dominguez⁴, N. Prados⁵, B. Buch⁶, B. González López de Bustamante⁷, F.J. Prados⁸, M. Ruiz-Jorro⁹, J.L. Gomez¹⁰, L. De la Fuente¹¹, M. Devesa¹², M. Muñoz-Cantero¹³, C. Pardos¹², L. Martinez³

¹CIRH Center for Infertility and Human Reproduction, Medical Department, Barcelona, Spain ;

²Hospital General Universitario de Valencia, IVF Laboratory, Valencia, Spain ;

³Hospital Universitario Virgen de las Nieves, Unidad de reproducción, Granada, Spain ;

⁴IERA instituto extremeño de reproducción asistida, Medical Department, Badajoz, Spain ;

⁵IVIRMA Sevilla, IVF Laboratory, Sevilla, Spain ;

⁶Centro Gutenberg, IVF Laboratory, Malaga, Spain ;

⁷Clínica NIDA, IVF Laboratory, Vigo, Spain ;

⁸IVF Centre Consulting, Consulting, Madrid, Spain ;

⁹CREA Medicina de la reproducción, Departamento de Andrología Reproductiva, Valencia, Spain ;

¹⁰Centro CEFIVBA-Wilson Fertility, Medical Department, Palma de Mallorca, Spain ;

¹¹Hospital 12 de Octubre, Asisted Reproduction Unit. O&G Department, Madrid, Spain ;

¹²Dexeus University Hospital, Department of Obstetrics- Gynecology and Reproductive Medicine Dexeus Mujer, Barcelona, Spain ;

¹³IVI Alicante, Medical Department, Alicante, Spain

Study question: What is the SARS-CoV-2 positivity rate following the Spanish Fertility Society (SEF) / Association for the Study of Reproductive Biology (ASEBIR) screening recommendations?

Summary answer: The SARS-CoV-2 positivity rate in the centers following the SEF/ASEBIR screening recommendations was 0.316% after the first survey and 0.364% after the second one

What is known already: Due to the Sars-Cov-2 pandemic, all the Medical Assisted Reproduction (MAR) centers in Spain had to interrupt their activity most of the time during the first pandemic wave. On April 27th activity was restarted, and SEF and ASEBIR jointly elaborated a guide describing their SARS-CoV-2 screening recommendations for MAR centers. This document aims to achieve a safe environment for patients and staff. It includes the possibility of screening patients through a targeted clinical interview and the use of reverse-transcriptase polymerase chain reaction (RT-PCR). The aim of this study is to quantify the SARS-CoV-2 positivity rate based on these recommendations.

Study design, size, duration: National multicenter cross-sectional study. Information was gathered from centers using an anonymous survey asking for aggregated data about the number of positive cases among screened patients, sent twice. The first survey covered the period April 27th - June 30th. Second survey covered July 1st - August 31st. Response rates among centres were 9% (29/319) and 6% (20/319), respectively. This study includes 2,695 and 4,068 screenings performed in the first and the second survey, respectively.

Participants/materials, setting, methods: The SEF/ASEBIR recommendations describe two screening strategies. Strategy (a) consists in a targeted clinical interview (TCI) evaluating clinical symptoms and exposure risk, first before starting the cycle, and before egg-retrieval, intrauterine insemination (IUI), and/or embryo transfer (ET). Suspicious cases could be confirmed by further RT-PCR testing. Strategy (b) consists in conducting the same first TCI, and a systematic RT-PCR testing before the medical procedure in all patients. All patients in both strategies have a TCI.

Main results and the role of chance: In the 1st survey, 1,177 screenings and 919 RT-PCR (78.07%) were performed before the egg-retrieval. One patient with a negative TCI and positive RT-PCR was detected, and the cycle was cancelled. 1,518 screenings and 1,161 RT-PCRs (76.48%) were performed before the ET / IUI. Two patients with a positive TCI were detected, one did not perform a RT-PCR, while the other resulted in a positive RT-PCR. Both cycles were cancelled. Besides, 5 patients with negative TCI performed a RT-PCR with a positive result; all 5 were cancelled. Overall, the SARS-CoV-2 positivity rate was 8/2533 (0.316%), of which 7/2533 (0.276%) were identified by RT-PCR testing.

The 2nd survey included 1,376 screenings and 1,009 RT-PCR (73.32%) performed before the egg-retrieval. Four patients with negative TCI and further positive RT-PCR were detected, and their cycle was cancelled. 2,692 screenings and 2,134 RT-PCR (79.27%) were performed before ET / IUI. Two patients had a positive TCI, one with a negative, the other with a positive RT-PCR testing; both cycles were cancelled. Besides, 8 patients with negative TCI, but positive RT-PCR testing, were detected and their cycles cancelled. Overall, the SARS-CoV-2 positivity rate was 14/3846 (0.364%), of which 13/3846 (0.338%) after positive RT-PCR testing.

Limitations, reasons for caution: The criteria for performing the RT-PCR testing were not the same in all MAR Centres or even in the same centre at different times. Due to the low response rate of the study, we should not extend these results to all the MAR Centres in Spain.

Wider implications of the findings: The results of the surveys suggest that the SEF / ASEBIR recommendations could be a good screening strategy for SARS-Cov-2 at MAR Centres. Further survey collected at different times of the pandemic are warranted, including new strategies for screening as antigen tests or vaccination status.

Trial registration number: Not applicable