

The Association of Reproductive and Clinical Scientists (ARCS) and British Fertility Society (BFS) U.K. update to guidance on Fertility treatment during the Covid-19 pandemic

Prepared by the ARCS/BFS COVID working group* on behalf of the Executive Committees of ARCS and the BFS.

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This is the 5th Update to ARCS/BFS guidance on fertility treatment during the Covid 19 pandemic. As the course of the pandemic alters and more data becomes available, clinicians are advised to remain familiar with the evidence and with local and national guidelines relevant to their practice.

1. Infection Control measures.

On 27th January 2022, England returned to 'Plan A' measures for dealing with the Covid-19 pandemic. Eligible people are strongly advised to get vaccinated and have the booster against the coronavirus. There are no restrictions on social mixing, although ventilation is advised for indoor spaces. Stricter rules remain in place in Scotland, Northern Ireland and Wales (1). In England, face masks are no longer compulsory in public settings. However, face coverings remain a requirement in healthcare settings, including fertility clinics. We support clinics in requiring this of patients, employees and visitors. Measures taken during the pandemic to moderate the number of physical attendances remain useful but consideration should be given to balancing the protection of patient and staff safety with the other needs of patients undergoing fertility treatment. For instance, it is reasonable to permit face to face consultations if requested by patients and for partners to be present at crucial times in the patient journey, such as embryo transfer and pregnancy scans.

2. Vaccination against Covid-19

Vaccination against Covid-19 is an effective and safe measure and patients should be strongly urged to have the vaccine when it is offered. Studies show that Covid-19 infection during pregnancy is associated with an increased risk of requirement for intensive care, ventilation and ECMO compared to the situation in non-pregnant women. The UK maternal mortality rate from COVID-19 is 2.4/100 000 maternities (2). There is also an elevated level of risk to the fetus, in the form of iatrogenic pre-term birth, small for gestational age and stillbirth. It is known that the approved Covid-19 vaccines have a high level of efficacy against severe disease, and there is no reason to suppose that this should be different in relation to pregnancy. The overwhelming majority of cases of hospital admission and severe illness among pregnant women are in individuals who have not received the vaccine (2). The safety of vaccination in pregnancy is supported by studies showing no impact on miscarriage rates (3) and the absence of safety signals from the use of vaccines in over 275,000 women in the USA and UK.

Patients planning or undergoing fertility treatment should therefore be strongly encouraged to get vaccinated or to complete the course if started.

Patients may continue to have misgivings and questions about Covid-19 vaccination in relation to fertility treatment. They can however be assured that a significant body of evidence now supports the safety of vaccination in people trying to conceive. Studies show that the vaccine does not affect sperm parameters (4) or ovarian reserve (5). Transient alterations in the menstrual cycle are common following the vaccine (6), as they are in association with Covid-19 infection (7). These are unlikely to have any long-term significance. Vaccination of either partner is not appreciably associated with per-cycle fecundability in couples trying to conceive (8). Fertility treatment outcomes (9, 10) are not affected by previous Covid-19 vaccination.

Our two societies have produced patient-facing FAQ on the subject of Covid-19 vaccination and fertility (11) which may help deal with patient concerns, especially when backed up by support from clinicians who are empathetic, supportive and non-judgmental. Based on the data available, clinicians may confidently advise fertility patients to have the vaccine and booster when offered, prior to, during or after fertility treatment.

3. Action in the event of a positive test during treatment

Patients who test positive for the coronavirus during treatment should have their treatment delayed. This is to minimise the risk of infection to other patients and staff and to mitigate any potential adverse effects of the infection on treatment cycle outcome. Clinical data on the outcome of treatment cycles following Covid-19 infection are scarce (12, 13). However, clinicians should be aware that the virus has the ability to affect endometrial and ovarian function and sperm parameters (14, 15).

The duration of delay of treatment following infection should take into account the severity of the infection, the nature of the planned treatment and relevant local/national guidelines. UK multidisciplinary guidance advises that elective surgery should be delayed for at least 7 weeks following a positive Covid-19 test (16, 17). Where procedures do not require anaesthesia or deep sedation, a shorter delay may be reasonable in mild or asymptomatic cases, once they are past the infectious period.

Disclaimer This guidance represents the views of ARCS/BFS, which were reached after careful consideration of the scientific evidence available at the time of preparation. In the absence of scientific evidence on certain aspects, a consensus between the relevant members of the COVID-19 working group and the Executive teams has been obtained. It is produced as an aid to good clinical practice and clinical decision making. ARCS/BFS are not liable for damages related to the use of the information contained herein. We cannot guarantee correctness, completeness or accuracy of the guidance in every respect. The advice expressed herein is not binding on professionals working in the field of human reproduction and embryology, however it represents best practice in the view of the BFS and ARCS. Please be aware that the evidence base for COVID-19 and its impact on infertility patients, pregnancy and related healthcare services is developing rapidly and the latest data or best practice may not yet be incorporated into the current version of this document. ARCS and BFS recommends that any departures from local clinical protocols or guidelines should be fully documented in the patient's case notes at the time the relevant decision is taken.

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