Identifying Repeated Unsuccessful IVF via New Algorithm

Alira Pasha

Department of Clinical Embryology, Kasturba Medical College of Manipal, Karnataka, India

INTRODUCTION

For patients who are trying to conceive, unsuccessful IVF attempts can be painful, exhausting, and devastating. New research led by Melbourne IVF fertility specialists seeks to solve these issues with a new approach that personalizes the diagnosis of RIF (recurrent implantation failure) and is intended to enhance patient fertility counselling and preparation. RIF, according to the authors, is a "imperfectly described condition lacking a robust scientific basis" that ignores key aspects of the IVF treatment process, such as embryo grading and "meaningful" pregnancy outcomes. They agree that an updated concept is long overdue, and they propose a new algorithm known as the theoretical cumulative implantation rate (TCIR), which uses empirical data to determine if a patient should be diagnosed with RIF. Each embryo transferred after an IVF cycle has a theoretical implantation rate (TIR) that is calculated based on a variety of variables, including female age, embryo quality, cycle specifics, chromosomal normality for tested embryos, and inter-laboratory variability.

Dr Genia Rozen, lead author and fertility specialist at Melbourne IVF, told newsGP that the new definition is also intended to improve the patient–doctor relationship. 'It will help with talks about stopping fertility therapy and leading to the adoption of donor pregnancy options,' she said.

'Following several failed IVF cycles, patients often consult their GP in primary care. Patients are sometimes in a bad place at this stage and turn to their trusted family doctor for help.

'At this time, GPs will play a supporting role in these patients' care by directing and counselling them.' The TCIR method seeks to enhance clinical decision making with a more individualized and scientific approach, in addition to providing patient care. Dr. Rozen emphasizes that because RIF is not a diagnosis in and of itself, the simpler algorithm will cut down on unnecessary testing and clinical treatments by focusing on one question: How many failed embryo transfers do you think it would take before you start looking for pathology?' A personalized TCIR considers all factors that may influence the likelihood of pregnancy,' she said.

The aim of improving patient counselling and assisting in timings for launching inquiries, which are often not highly evidence based, is to enhance the patient's reproductive path. 'This approach has drawbacks; for example, the data required to estimate the probability of pregnancy from an embryo transfer may not always be available. Even an approximation based on rational and coherent parameters, which also includes variables that can affect the likelihood of pregnancy, is an appealing prospect. 'This will also result in a more accurate RIF estimate and definition.' Although patients should be aware of their chances of being pregnant, GPs will help them determine their theoretical pregnancy rate. 'It is important for patients to consider their chances of being pregnant with their transferred embryo as well as their theoretical pregnancy chances after multiple transfers,' says the doctor. Dr Rozen said. 'It also helps to inform patients that progress is still possible [if they continue with care], and a stronger suggestion that they can in fact continue with IVF treatment. 'This information also decreases the pressure to commence inquiries and/or treatments which are not firmly ground in evidence.' Following further development of the concept and expert opinion, pilot studies of the proposed TCIR algorithm are planned to be implemented in a general practice environment. A more systematic and customized concept of RIF, according to Dr. Rozen, would benefit not only future study and clinical decision-making through GPs, but also patients planning a pregnancy. 'We hope that raising awareness of this idea will reduce patient anxiety and their desire to undergo unnecessary diagnostic tests during IVF,' she said.

Correspondence to: Alira Pasha, Department of Clinical Embryology, Kasturba Medical College of Manipal, Karnataka, India, E-mail: pasha724@yahoo.com

Received: May 03, 2021; Accepted: May 19, 2021; Published: May 26, 2021


Copyrights © 2021 Pasha A. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited.