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Poster Presentations

P-61

An overview of application of stem cells as a resource for male infertility treatment

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Background: Male infertility due to decreased semen quality is a growing global problem.
Objective: Commonly used strategies for treating infertility include medication, intrauterine insemination, and in vitro fertilization. In recent years, mesenchymal stem cells have created new opportunities to treat a variety of disorders, including infertility and new expectations for managing reproductive disabilities. Stem cells are undifferentiated cells that are able to regenerate and proliferate and are also able to produce specialized cells under appropriate conditions. They are present in all stages of the fetus, embryo and adult and can multiply in different cells.
Materials and Methods: We searched the articles published in English from 1985-2020 using the keywords nanoparticles, male infertility, imaging, and toxicity in Scopus and PubMed databases. While many questions remain about stem cells, stem cells have undoubtedly opened up new avenues for infertility treatment.
Results: In summary, most studies have shown that mesenchymal stem cells can be used as a viable option for the treatment of azoospermia in men. However, there is a need for further evaluation of the effectiveness of these cells in treating infertility.
Conclusion: In this review, we discuss and summarize different stem cell approaches to the treatment of male infertility to provide updates on stem cell therapy research.
Key words: *Stem cells, Male infertility, Treatment, Transplantation.*