

Male Contraceptive Injection: The Promise and Potential of RISUG

Dr. Lipica Das

Abstract: *Reversible Inhibition of Sperm Under Guidance (RISUG) is an innovative male contraceptive method involving a nonhormonal injection that blocks sperm flow through the vas deferens. This simple, long-lasting, and minimally invasive procedure is currently undergoing Phase III clinical trials in India, where it has shown a 96-100% effectiveness in preventing pregnancy. RISUG offers several benefits, including reversibility and duration of up to 10-15 years from a single injection. Although it holds great promise, challenges such as public acceptance, regulatory approval, and long-term efficacy remain. Ongoing research may transform the landscape of male contraception globally.*

Keywords: male contraceptive, RISUG, sperm inhibition, reversible contraception, long-term contraception

1. Introduction

The male contraceptive injection. It is also known as RISUG - Reversible Inhibition of Sperm Under Guidance. It is a hormonal injectable contraceptive method for men.

How it Act:

- 1) The injection contains a non-toxic, non-hormonal substance called styrene maleic anhydride (SMA).
- 2) SMA is injected into the vas deferens, the tube that carries sperm from the testicles to the penis.
- 3) The substance creates a barrier, preventing sperm from passing through the vas deferens and fertilizing an egg.

Benefits of Injection:

- 1) Effective: RISUG has been shown to be 96 - 100% effective in preventing pregnancy.
- 2) Reversible: The procedure can be reversed by injecting a dissolving agent.
- 3) Long-lasting: A single injection can provide contraception for up to 10 - 15 years.
- 4) Minimally invasive: The procedure is relatively painless and doesn't require any kind of surgery.

Possible side effects:

- 1) Pain or swelling at the injection site
- 2) Fever
- 3) Skin rashes
- 4) Itching
- 5) Epididymitis (inflammation of the epididymis, a tube behind the testicle)

Current status in India:

RISUG is currently in Phase III clinical trials in India and has been approved for use in that country. However, it is not yet widely available or approved for use in other countries, including the United States.

Other male contraceptive injections in development:

- 1) Vasal gel: A non-hormonal, non-surgical gel injection that blocks sperm flow.
- 2) SHBG (Sex Hormone Binding Globulin) contraceptive: A hormonal injection that reduces sperm count.

2. Challenges

- 1) Regulatory approvals
- 2) Funding for further research and development
- 3) Public awareness and acceptance
- 4) Addressing potential side effects and long-term efficacy concerns

The development of effective and reversible male contraceptive methods like RISUG has the potential to transform family planning and reproductive health options for males and couples worldwide.

3. Future Directions

- 1) Regulatory approvals
- 2) Funding for further research and development
- 3) Public awareness and acceptance
- 4) Addressing potential side effects and long-term efficacy concerns.

“Reversible Inhibition of Sperm Under Guidance, offers a game-changing solution”

Welfare for the reproductive couple -

- Effective: 96 - 100% success rate in preventing pregnancy.
- Reversible: Simple procedure to restore fertility.
- Long-lasting: Up to 10 - 15 years of protection.
- Minimally invasive: Quick and relatively painless procedure.
- Empowers men: Shared responsibility in family planning.

How it works:

- Non-hormonal, non-toxic substance injected into vas deferens.
- Blocks sperm flow, preventing fertilization.

Advantages over existing methods -

- More effective than condoms and vasectomy.
- Reversible, unlike vasectomy.
- Less user-dependent than condoms.

Impact:

- Reduces unintended pregnancies.

Volume 13 Issue 10, October 2024

Fully Refereed | Open Access | Double Blind Peer Reviewed Journal

www.ijsr.net

- Increases male involvement in family planning.
- Enhances reproductive health and autonomy.

Global Significance:

- Addresses unmet need for male contraception.
- Supports gender equality in family planning.
- Potential to reduce population growth.

4. Summary

The male contraceptive injection offers a revolutionary, effective, and reversible solution for family planning, empowering men to take an active role in reproductive health.

References

- [1] National Library of Medicine
- [2] Textbook of Contraception Sexual and Reproductive Health