

Offering Fertility Preservation in Children Facing Gonadotoxic Therapy - A Multi-Disciplinary Approach

Vidhu B. Joshi, B.Sc.¹, Adriana M. Delgado, B.Sc.², Patricio C. Gargollo, M.D.¹, Asma Chattha, M.B.B.S.³, Zaraq Khan, M.B.B.S.⁴, Landon W. Trost, M.D.¹, Yulian Zhao, M.D., Ph.D.⁴, David L. Walker, M.Sc.⁴, Dean D. Potter, Jr., M.D.⁵, Siobhan T. Pittock, M.B., B.Ch.³, Carola A. S. Arndt, M.D.³, Anthony G. Krenik, B.Sc.⁶, Candace F. Granberg, M.D.¹

¹Department of Urology, ²Children's Research Center, ³Department of Pediatric & Adolescent Medicine, ⁴Department of Obstetrics & Gynecology, ⁵Division of Pediatric Surgery, ⁶Department of Laboratory Medicine and Pathology



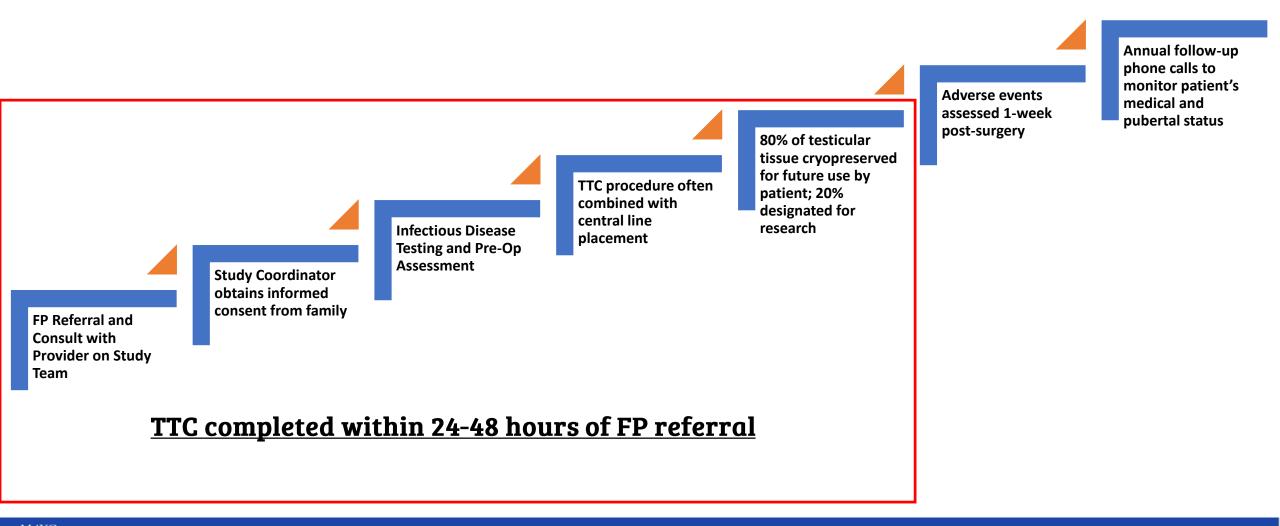
Oncofertility - Background

- ~1 in 3 male childhood cancer survivors will suffer from fertility impairment.1
- Several fertility preservation (FP) counselling guidelines available:
 - NCCN, ASCO, AAP, American Society for Reproductive Medicine, Endocrine Society²
- Too few programs exist due to barriers to program development:
 - Lack of institutional support and research funding for TTC
 - Difficulty obtaining IRB approval
 - Inadequate access to REI/Urology
 - Low referral rates
 - Gaps in provider knowledge and/or provider discomfort with discussing fertility
 - Cost and insurance coverage issues for patients



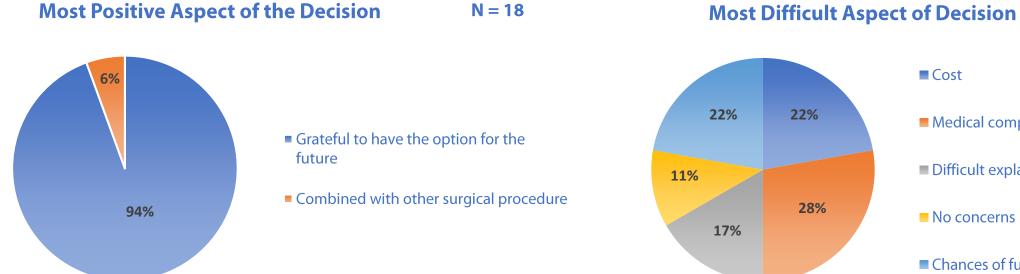
2. Moravek, et al. J Adolesc Health., 2019

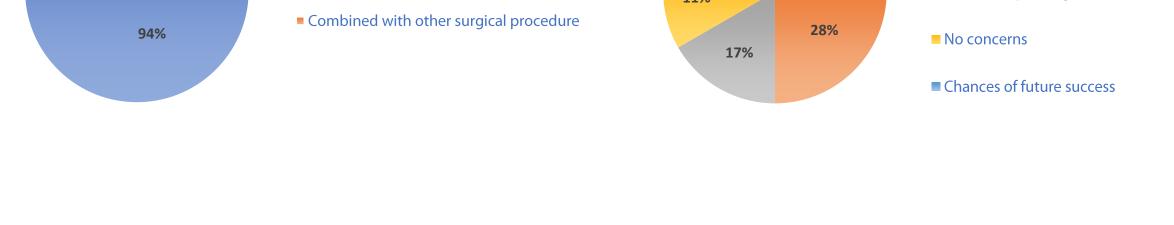
Mayo Clinic FP Program - Workflow





Patient Satisfaction Survey







N = 18

■ Cost

■ Medical complications/risk/pain

■ Difficult explaining to child

Conclusions

• FP must be offered routinely to eligible patients in the childhood cancer setting in order to improve the quality of long-term care that is provided.

We are providing TTC procedures in a safe, high-quality, and affordable manner.

In the childhood cancer setting, patient responses suggest that FP improved family perspectives
on the quality of comprehensive care provided.

• Our program is uniquely poised in the Midwest to offer this procedure to children that would not otherwise have options to protect future reproductive potential.