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

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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

FP Referral and Consult with Provider on Study Team

Study Coordinator obtains informed consent from family

Infectious Disease Testing and Pre-Op Assessment

TTC procedure often combined with central line placement

80% of testicular tissue cryopreserved for future use by patient; 20% designated for research

Adverse events assessed 1-week post-surgery

Annual follow-up phone calls to monitor patient’s medical and pubertal status

TTC completed within 24-48 hours of FP referral
Patient Satisfaction Survey

**Most Positive Aspect of the Decision**

- Grateful to have the option for the future
- Combined with other surgical procedure

N = 18

**Most Difficult Aspect of Decision**

- Cost: 22%
- Medical complications/risk/pain: 22%
- Difficult explaining to child: 17%
- No concerns: 11%
- Chances of future success: 28%

N = 18
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.