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INTRODUCTION

Off-site semen collection for cryopreservation and storage would be beneficial for patients that do not have access to a semen processing and long-term storage laboratory. The premise of this pilot study was to ascertain what parameters could most affect the outcome of specimens collected off-site and shipped to our facility for processing. **OBJECTIVE**

The purpose of this pilot study is to determine the feasibility of a mail-in cryopreservation program with respect to survivability.

PROCEDURE

Anonymous donors currently in CryoGam's donation program were utilized as their own control due to historical data regarding the donors' ejaculate parameters. Donors collected an ejaculate at home into a sterile specimen cup. Immediately after ejaculation, donors were instructed to pour 10mLs of Hams F-10 (in kit) into the specimen cup containing the ejaculate.

PROCEDURE (cont.)

The cup was placed into a small blood transport bag containing absorbent paper and then into a 7" x 9" PCM ambient shipper with a foam box insert. A pre-printed FedEx label was placed on the outside of the box and the package taken to a Fed Ex Drop-off location closest to their residence on the day the specimen was collected. Each donor submitted three samples. Processing of specimen began within 30 minutes of arrival via FedEx. Total transit time was calculated upon arrival. The following parameters were examined pre-freeze: 1. Volume 2. Count 3. Motility 4. Speed 5. Direction 6. Agglutination. Weather temperatures for the day the specimen was in transport were also documented. The specimen(s) were then processed according to a cryopreservation protocol. All specimens were washed prior to freezing. A post-thaw evaluation was performed to determine survivability.

RESULTS

A total of n=10 donors began the study with n=9 finishing as of to date. There were n=29 specimens evaluated. Average time from collection to delivery was 21.4 hours. Pre-process motility ranged from 15-80% (average 59%) and post thaw motility ranged from 1-60% (average 28%). There seemed to be a correlation between transit time, distance, and outside temperature with some donors but not with others.

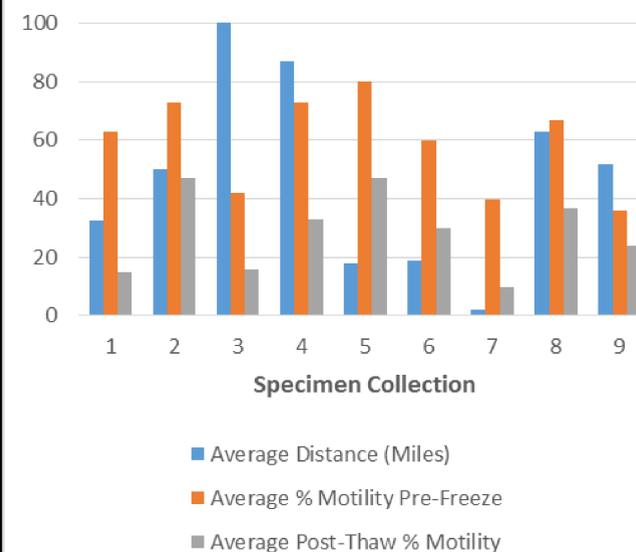
CONCLUSIONS

Data suggests that home collection can be a viable option for distant populations that do not have access to care. Several parameters play an important role in predicting a positive outcome. However, due to the wide range of outcome care must be taken when counseling patients on potential outcome. Further investigation is necessary in order to better assess the feasibility of this process in the general population rather than donors with already proven fertility.

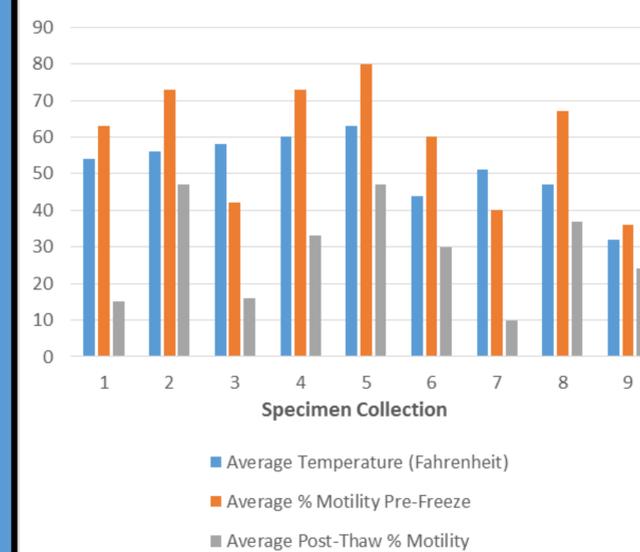
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Distance vs. Motility



Temperature vs. Motility



Transit Time vs. Motility

