Fertility Preservation at UCSF

Eve Harris, patient navigator
University of California, San Francisco
November 14, 2017
…no one told us prior to starting chemo that my eggs would become no good once chemo started.

That was heartbreaking and unfair…I hope the next person will be able to get some help.”

-- NW, September 1, 2017
Program goals

Learn

Educate

Random start ovarian stimulation for fertility preservation appears unlikely to delay initiation of neoadjuvant chemotherapy for breast cancer

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Program goals

Learn
Educate
Optimize patient care
Men
Average week: male referrals

- 3 patients are referred
  - most schedule banking to occur within 2 weeks

- Urologist consultations are rare

- We accommodate carry-in specimens from UCSF patients
Available to men/boys

Banking: M-F, 8am – 1 pm
Male reproductive health consultation
TESE / TESA (extraction; aspiration)
Testicular tissue cryo (pre-pubertal)
Women
Average week: female referrals based on 2015-16

3-4 patients are referred; all will be triaged within 2 business days
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33 will get medical consultation
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2 of those will be seen urgently
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3-4 patients are referred; all will be triaged within 2 business days

33 will get medical consultation

2 of those will be seen urgently

1 will cryopreserve urgently
Unduplicated female referrals, 2014-2017
Where patients come from

Plus:
- Arkansas
- Illinois
- New York
- China
- Alaska
- Hawaii
- Japan
- Thailand
Available to women/girls

- Egg and/or embryo cryopreservation
- Ovarian tissue cryopreservation
  - Mostly post-pubertal

We help coordinate but do not perform tissue harvest surgery (or oophoropexies)
Available to women post-cancer:

Full range of ART including

Egg donation

Gestational carriers

PGD / PGS
Provider referral

Intake by Navigator

Triage by RE within 1 business day

Urgent?

Clinic finds appt within several days

Insurance check

60-90 minute consultation
1) Med history; ca treatment plan review
2) Antral follicle count via ultrasound
3) Discussion:
   - potential affects of ca tx on fertility
     * including logistical, eg, hormone tx
   - fertility preservation options
   - family building goals; options

Consult / coordinate with treating Oncologist

GnRH agonist?

Follow up care avail

Cryo?

NO

Specific co$t info

YES

Random start COS
Urgent?

NO

Clinic finds appt within several days

Insurance check

YES

60-90 minute consultation
1) Med history; ca treatment plan review
2) Antral follicle count via ultrasound
3) Discussion:
   - potential affects of ca tx on fertility
     * including logistical, eg, hormone tx
   - fertility preservation options
   - family building goals; options

Cryo?

NO

Follow up care avail

YES

Specific co$t info

Random start COS

Consult / coordinate with treating Oncologist

GnRH agonist?
“…this is all happening very quickly… I’m gonna talk to my family today and try to figure out what we exactly want to do… I’m sorry I can’t be as decisive as quickly as necessary right now…”
Provider referral

Intake by Navigator

Triage by RE within 1 business day

Urgent?

Y

Clinic finds appt within several days

Insurance check

60-90 minute consultation
1) Med history; ca treatment plan review
2) Antral follicle count via ultrasound
3) Discussion:
   - potential affects of ca tx on fertility
   - including logistical, eg, hormone tx
   - fertility preservation options
   - family building goals; options

N

Clinic finds appt within appropriate timeframe

Consult / coordinate with treating Oncologist

GnRH agonist?

Follow up care avail

Cryo?

Y

Specific co$t info

Random start COS

N
*Overall, healthcare costs for the typical San Franciscan are about 20% higher than the U.S. average  [SmartAsset 2015]*
A busy week for new patient appointments

9/11/17 s/p Hodgkins
9/11/17 s/p Retinoblastoma
9/11/17 BRCA1
9/11/17 IDC
9/12/17 Hodgkins
The most diverse diagnoses during one week

IDC
BRCA
Cutaneous lymphoma
Rhabdomyosarcoma

ALL | SCT candidate
Sickle-cell disease | SCT candidate

Cervical ca; s/p trachelectomy
s/p Mucinous adenocarcinoma: RSO; chemo
To-date, the most patients cycling at once and who referred them  Feb 12, 2017

<table>
<thead>
<tr>
<th>IDC</th>
<th>Community</th>
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<tbody>
<tr>
<td>IDC</td>
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<tr>
<td>IDC</td>
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<td>Stanford</td>
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<tr>
<td>Endometrial</td>
<td>International</td>
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Some issues for the future of FP

- Costs
  - Disparities
- Technology changes
  - ART
  - Communications

- Changes in oncology
  - Practice
  - Culture
- Medical ethics & norms
  - OD, surrogacy, etc
Oncofertility Program
Overview

Kyle Stimpert, MSN, RN, ACNP
Breanne Roche, MSN, RN, CPNP
Our Timeline

- **2013**
  - ONS Chapter meeting on Oncofertility
  - Bre- DNP in Oncofertility
- **2014**
  - ENRICH/ECHO
  - Collaborate within our organization
- **2015**
  - Annual Oncofertility Consortium Conference
- **2016**
  - Business plan presentation
  - Oncofertility Service Line
  - Annual Oncofertility Consortium Conference
- **2017**
  - Funding issues
Business Plan Development

- Executive Summary
- Current National Environment
- Overview of Oncofertility
- Current State at Hospital
- Differentiating
- Fertility Risk
- Program consult goals
- Define Navigator role
- Proposed Staffing Model
- Programmatic Components
- Procedural Costs
- Collaborative Funding Support Needs
- Challenges and How to Address
- 6 month pilot - Measures of Success
- Follow Up/Action Items
Oncofertility Service Line

Increase FP consults among newly diagnosed cancer patients

- Adult NP
- AYA Nurse Navigator
- Pediatric NP
- REI Fellows
- REI Nurse
Oncofertility: 2016 Patient Population at UHCMC and RB&C

- **FEMALE**
  - Pediatric: 6
  - Adult: 22

- **MALE**
  - Pediatric: 6
  - Adult: 11
Oncofertility: 2016 Referrals: Disease Type

DISEASE TYPES

- Breast Cancer: 11%
- Lymphoma: 16%
- Leukemia: 20%
- Brain Tumor: 13%
- Sarcoma: 7%
- Melanoma: 7%
- Rhabdomyosarcoma: 2%
- Ovarian: 2%
- MDS: 2%
- Unknown: 2%
- Germ Cell: 2%
- Germinoma: 2%
- Desmoid: 4%
- Immunodeficiency: 2%
- Ovarian Cancer: 4%
- Brain Tumor: 2%
- Ovarian Cancer: 2%
- Immunodeficiency: 2%
Oncofertility Services Provided- Females

- Initially seen/triaged by:
  - Oncofertility Service Line
  - REI team
    - Consult within 24 hours
    - Dr. Liu, Dr. Goldfarb, Dr. Rossi. Dr. Weinerman
    - Offices at UHCMC, satellites on east and west side of Cleveland

- Discuss family building options

- Oocyte cryopreservation, embryo cryopreservation
  - Communication with the oncology team regarding treatment and fertility preservation window
  - Ovarian Tissue Freezing (not available at UHCMC)- Refer to University of Pittsburgh Medical Center or Cincinnati Children’s Hospital Medical Center
  - Preimplantation Genetic Diagnosis (PGD) for heritable cancers
Oncofertility Services Provided- Males

• Initially seen/triaged by:
  – Urology
    • Dr. Kiranpreet Khurana (Urology)
    • Semen cryopreservation
      – Sperm banking available at Ahuja or Westlake
    • Testicular sperm extraction
    • Sexual health management
    • Testicular Tissue Cryopreservation- Refer to University of Pittsburgh Medical Center or Cincinnati Children’s Hospital Medical Center

  – Oncofertility Service Line for urgent consults

  – Discuss family building options
Oncofertility Services Provided-Pediatrics

- Initially seen/triaged by
  - Peds team: PNP, AYA RN Navigator, oncologist
  - Discuss infertility risk & fertility preservation options

- Refer to REI team as indicated
Referring Patients/Workflow

- Email oncofertility DL with treatment plan and estimated start date
  - Females
    - Oncofertility team
    - REI
  - Males
    - Dr. Khurana- urology
    - Oncofertility Service Line
- For urgent consult, page Oncofertility pager
- Coordination of care with oncology, REI, surgery
Oncofertility Ambulatory EMR Update

- Goal is early referral to REI/Urology- at diagnosis
- Oncofertility check box in all new patient clinic notes to prompt oncologist to ask the patient if they have been informed of the impact their treatment may have on fertility
- Lab order set build into note to allow ease in ordering
Oncofertility Ambulatory EMR Update
Oncofertility Site on SCC Intranet

UH Seidman Cancer Center

Welcome to the UH Seidman Cancer Center Intranet

MENU

- Announcements
- Chemotherapy
- Radiation Therapy
- Disease Teams & Tumor Conf.
- Clinical Trials
- Pol., Proc., and Clin Guidelines
- Patient Education
- PI Sheets - Patient Information
- Pharma Eval Form - Patient Ed
- End of Treatment / Survivorship
- Staff Education & Development
- Quality and Accreditations
- Library Resources
- Community Sites
- Departments
- UHCare for Oncology
- Patient Experience
- UH Intranet
- CASE CCC
- UHCare for Oncology
- Physician Portal
- Community Record
- M moleal Clarity (Sphere)
- Case Exports
- Medical Staff Directory
- IDX Rad
- Core Library
- Pharmacy
- Security
- Cancer Links
- Corporate Directory
- Events Calendar
- Directions to Seidman
- UHSCC Newsletter
- UHSCC Nursing Newsletter
- UHSCC Marketing Videos
- Celebrating Our Care
- AJCC 7th Edition
- Frequent Forms
- End of Treatment Summary
Forms on Cancer Center Intranet

Oncofertility

This page contains information for the Oncofertility group. Please contact the following people for any questions:

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Announcements

Check here for new announcements - This page will be going live soon!

Forms

- Andrology Cryopreservation Fert Pres
- Andrology order form
- Clinician instruction
- Lab E-Req
- Off site collection
- Patient Instructions for Semen Collection
- Clinical Practice Forms (need documents or new document list)
Challenges

Funding
- No consistent funding
- Hospital budget constraints
- Not ‘owned’ by one department (REI, pediatrics, oncology, urology)
- Unable to start ovarian/testicular tissue protocols

System Implementation
- Kids are not “mini adults”
- Educating oncologists, RN, APP, SW
- Unable to fully implement program without funding
- Raising awareness of oncofertility and our program

Data Tracking
- No centralized software
- EMR ambulatory update not applicable to all peds patients
- Keeping up with the database

Sustainability
- Dedicated time specific to Oncofertility
- Cross coverage
- Satellite and community outreach
Funding

• AYA Navigator
  – Position funded through Pediatric Nursing (AYA care and Fertility Preservation)

• Acute Care Nurse Practitioner
  – Initial funding from Cancer Center after business plan presentation
  – Attempt to gain funding from grant or donor

• Pediatric Nurse Practitioner
  – Intermittent office time

• REI Nurse
  – Point person in fertility clinic, allotted time from office manager
Next Steps for the Oncofertility Program

• Continue to build the oncofertility program and service line
• Explore funding opportunities
• Identify champions at community sites
• Develop a standardized data tracking system
• Market our service line and raise awareness
• Continue to coordinate oncofertility education within the system
Our Team

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