Men's Sexual Health after Transplant

Celebrating a Second Chance at Life Survivorship Symposium

August 5, 2020

Eric Zhou, PhD
Dana-Farber Cancer Institute
MEN’S SEXUAL HEALTH AFTER TRANSPLANT

Eric Zhou, PhD
Assistant Professor | Harvard Medical School
Staff Psychologist | Dana-Farber Cancer Institute

eric_zhou@dfci.harvard.edu

BMT InfoNet
Clinical Research

Genital Chronic GVHD in Men after Hematopoietic Stem Cell Transplantation: A Single-Center Cross-Sectional Analysis of 155 Patients

Simon M. Mueller 1,*, Peter Haeusermann 1, Alicia Rovó 2, Joerg P. Halter 2, Jakob Passweg 2, Peter Itin 2, André Tichelli 2

1 Department of Dermatology, University Hospital Basel, Switzerland
2 Department of Hematology, University Hospital Basel, Switzerland

A B S T R A C T

We assessed the prevalence and clinical features of genital skin changes in men after allogeneic hematopoietic stem cell transplantation (HSCT) and evaluated the correlation between genital chronic graft-versus-host disease (cGVHD) and other manifestations of cGVHD as well as sexual issues. In a cross-sectional cohort study, 155 male recipients alive 1 year or more after HSCT were assessed during their annual follow-up evaluation. Correlation between genital skin changes and other cGVHD manifestations was evaluated, and post-transplantation sexual contentment and sexual functioning were assessed by 2 self-assessment questionnaires, including the 5-item version of the International Index of Erectile Function (IIEF-5) and the modified brief Sexual Symptom Checklist (mBSSC). Median time between HSCT and genital examination was 5.9 years (range 1 to 30.3 years). Thirty-one of 155 patients (20%) presented with genital skin changes. Twenty-one of these (13%) presented clinically inflammatory genital skin changes considered as genital cGVHD: 12 had inflammatory (noninfectious) balanoposthitis, 6 had lichen sclerosus-like lesions, 5 had phimosis, and 2 patients had more than 1 feature. Patients with inflammatory genital skin changes had a significantly higher coincidence of oral (P< .0001), ocular (P< .002), and/or cutaneous cGVHD (P< .026) when compared with patients without genital lesions. The rate of IIEF-5 questionnaire response was 93% (91 of 155). Among them, 67% reported erectile dysfunction. Erectile dysfunction was significantly more frequent in patients with genital cGVHD (P = .0075). Seventy-five of 155 patients (48%) answered the mBSSC questionnaire. Only 40% of them reported sexual contentment. Genital skin changes in male recipients after allogeneic HSCT are frequent and seem to be an under-reported relevant late effect. Inflammatory genital skin changes can be considered as a form of genital cGVHD often associated with manifestations of extragenital mucocutaneous cGVHD.

© 2013 American Society for Blood and Marrow Transplantation.
A Known Issue

- 155 male patients at 1 year+ post transplant
- 20% had genital skin changes
- 13% inflammatory genital skin changes
  - 8% inflammatory redness
  - 4% rash
  - 3% narrowing of the urethra
  - 1% had more than one feature
Treatment Impact

Transplant
- Hair loss
- Fear of infection for 100 days
- Graft versus host disease (rashes, nausea, mouth dryness)

Chemo
- Loss of interest
- Erectile dysfunction

Radiation
- Possible nerve damage
- Fatigue
Common Problems

- Decreased interest/low desire
- Problems with getting/keeping an erection
- Difficulty reaching orgasm
- Pain with erection/climax
- Changes in body image, perceived attractiveness
- Performance anxiety
- Worry about infection, hurting partner
Problems are Common

Sexually Active Men 1-Year After BMT

- Problem with Sexual Interest: 33%
- Do Not Feel Sexually Attractive: 56%
- Erectile Dysfunction: 50%
- Problem with Orgasm: 22%
Self-Image is Affected

- Impact on feelings of masculinity

- Feelings about being damaged, sense of loss

- Changes/Feelings can be hard to talk about: shame, guilt, embarrassment

- When we feel bad about our body it also diminishes our desire
Sexually Active?

6 Months Prior: 60%
3 Years After: 40%
A Culture of Sex/Silence
How has BMT affected your sex life?

"I'm right there in the room, and no one even acknowledges me."
Sex Matters

✓ Sex encompasses an emotional and physical experience that is life affirming.

✓ Sexual problems have a direct, negative, impact on quality of life.
Risk Factors
Sex is Complex

Function

Desire

Relationship
### Physical Function

<table>
<thead>
<tr>
<th>Therapy Level</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Modify reversible causes</strong></td>
<td>Medication change</td>
</tr>
<tr>
<td></td>
<td>Lifestyle modification</td>
</tr>
<tr>
<td></td>
<td>Hormone replacement</td>
</tr>
<tr>
<td><strong>First-line therapy</strong></td>
<td>Oral erection agent</td>
</tr>
<tr>
<td></td>
<td>Vacuum erection device</td>
</tr>
<tr>
<td></td>
<td>Couples/sexual therapy</td>
</tr>
<tr>
<td><strong>Second-line therapy</strong></td>
<td>Self-injection (base of penis)</td>
</tr>
<tr>
<td></td>
<td>Vasodilators (into urethra)</td>
</tr>
<tr>
<td><strong>Third-line therapy</strong></td>
<td>Surgical prosthesis</td>
</tr>
<tr>
<td></td>
<td>Vascular reconstruction</td>
</tr>
</tbody>
</table>
Reversible Causes

6-24 months post-BMT recovery
Testosterone replacement therapy
- Skin patches
- Topical gel
- Injection
1: Vacuum Erection Devices

- Airtight cylinder attached to handheld pump
- Need lubrication
- Use ring around the base of penis to maintain erection
1. Oral Medication

- Oral drugs relax smooth muscles cells in arteries of penis allowing more blood flow
- They do not impact desire (sexual stimulation is needed)
- They will not work if nerves are damaged
- Not always effective after BMT
- There can be side effects
- It can be expensive
2. Injection Therapy

- Relaxes the blood vessels, increases blood flow to penis and prevents flow of blood out of the penis
- Most common side effect: about 1/3 men report some pain
- Must have 24 hours between doses, no more than 3x/week
2. Transurethral Treatment

• Small pellet of drug (alprostadil) is introduced into the urethra (the tube through which urine is passed) using a special disposable applicator.

• The drug is then absorbed through the wall of the urethra and passes into the erectile tissue, giving an erection within 5 to 10 minutes.
3. Penile Prosthesis

- Inflatable prosthetic device that is surgically implanted
  - Reservoir is implanted under the groin muscles; a pump sits under the loose skin of the scrotal sac, between the testicles
- Majority successful, with orgasm and sensation maintained at 5 years
- “Natural” erection no longer possible, but satisfaction is generally high
Reduced Desire

• It is common and frustrating
• “Use it or lose it”

• Consider the cause:
  ❑ Rule out hypogonadism (testosterone replacement therapy?)
  ❑ Stress
  ❑ Fatigue
  ❑ Depression
  ❑ Body image changes
  ❑ Pain
  ❑ Medication side effects (e.g., anti-depressants such as SSRI)
  ❑ Relationship problems
Men with erectile dysfunction may pull back physically
  - They often report a fear of not being able to perform
At the same time, partners are afraid of setting the patient up for failure and also pull back
What Has Worked For You?
Desire Through Communication

An opportunity to write a new chapter

• Sensate focus
  – Shifting from penetration to pleasure
  – Program of systematic touch
    • Set the stage
    • Bathe/Shower together
    • Massage
• Intimate talk
• “Desire diary”
• Self-stimulation
• Using aids (reading, video etc.)
Resources

http://www.sexhealthmatters.org/

Sexual Health in Hematopoietic Stem Cell Transplant Recipients

Zhuoyan Li, MD1, Prema Mewawalla, MD2, Pamela Stratton, MD3, Agnes S.M. Yong, MD4, Bronwen E. Shaw, MD, PhD5, Shahruki Hashmi, MD6, Madan Jagasia, MD7, Mohamad Mohly, MD8, Navneet S. Majhail, MD8, Bipin N. Savani, MD7, and Alicia Rovó, MD10

1Department of Medicine, Vanderbilt University Medical Center, Nashville, Tennessee
2Department of Hematology, Western Pennsylvania Cancer Institute, Pittsburgh, Pennsylvania
3Program in Reproductive and Adult Endocrinology, Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, Maryland
4Department of Haematology, SA Pathology, and School of Medicine, University of Adelaide, Adelaide, South Australia, Australia
5Center for International Blood and Marrow Transplant Research, Fred Hutchinson and the Medical College of Wisconsin, Milwaukee, Wisconsin
6Division of Hematology, Mayo Clinic, Rochester, Minnesota
7Hematology and Stem Cell Transplantation Section, Division of Hematology/Oncology, Department of Medicine, Vanderbilt University Medical Center and Veterans Affairs Medical Center, Nashville, Tennessee
8INSERM (National Institute of Health and Medical Research) 938, Paris, France
9Blood and Marrow Transplant Program, Cleveland Clinic, Cleveland, Ohio
10Department of Hematology, University Hospital of Bern, Bern, Switzerland
Questions?

Celebrating a Second Chance at Life Survivorship Symposium

August 5, 2020

bmtinfonet.org ✦ help@bmtinfonet.org ✦ 847-433-3313