

The Impact of Skin Tears on Patients and Breast Imaging Centers:

Viewpoints from Two Different Perspectives

Maria Shonyo, President
Vela Technologies, LLC

Introduction

Even when technologists take the utmost care positioning a patient’s breast for their mammogram, the skin under the breast may tear. Many factors make a woman more susceptible to skin tears (moisture or sweat under the breast; aging or thin, dry skin; taking certain medications such as steroids; a skin rash or yeast infection under the breast), or the tear may occur simply because the breast sticks to the receptor plate and the patient pulls away too quickly after the compression paddle is released.

Survey Respondents

To better understand the prevalence and consequences of skin tears, two blind, random, anonymous surveys were administered.

This paper highlights key findings from these two surveys:

- Patient Survey
 - November 2019
 - 788 female respondents across the U.S.¹
- Breast Imaging Center Survey
 - November 2019 – January 2020
 - 222 respondents across the U.S.²

Key Discoveries

Skin Tears May Happen More Often Than Commonly Thought	Significant Tangible Impact on Patients Who Have Skin Tears	Significant Emotional Impact on Patients Who Have Skin Tears	Significant and Far-Reaching Impact on Imaging Centers
<ul style="list-style-type: none"> • 4.7% of women reported experiencing a skin tear during a mammogram • Of the 35.1% of women who discovered their skin tear after they left the imaging center, only 40.5% contacted the facility to let them know • On average, imaging centers reported an annual skin tear rate of 0.49%, with some reporting rates as high as 10% or more <p>* How many more skin tears occur that your facility doesn't know about?</p>	<ul style="list-style-type: none"> • 10.8% said they will not go back for another mammogram as a result of their skin tear • 18.9% said they delayed their next mammogram • 16.2% said they switched to another facility <p>* How might this impact future cancer detection for these women?</p> <p>* How many patients are you losing?</p>	<ul style="list-style-type: none"> • 37.8% said the skin tear has made them more fearful of future mammograms • 16.2% said they felt like the imaging center did not care about their skin tear • 10.8% were told skin tears are common and therefore they felt “unheard” <p>* Who else do these women talk to about their experience?</p>	<ul style="list-style-type: none"> • Additional burden on staff and radiologists: marking charts, filling out incident reports, tending to the wound, handling follow-up calls, etc. • Patients who are fearful can be more difficult to position and therefore more challenging for technologists³ • Patients may delay or forego future mammograms or switch to another facility <p>* How does this affect your workflow?</p> <p>* What's the impact on your revenue?</p> <p>* How does this affect clinical risk?</p>

A Deeper Dive Into the Survey Results

Prevalence of Skin Tears

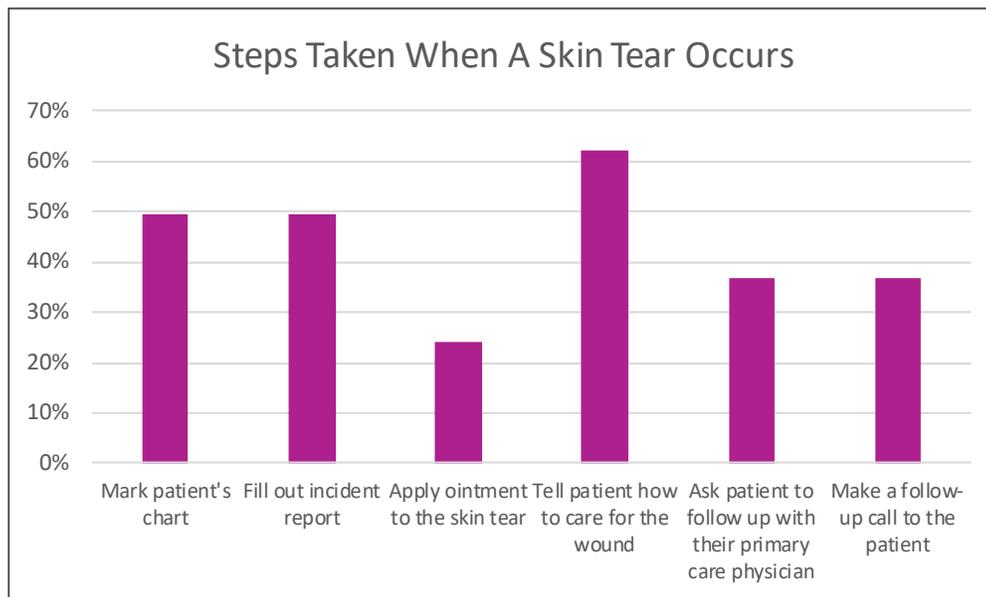
While the number of unreported skin tears is unknown, the patient survey indicated the majority of women who noticed their skin tear after leaving the imaging center did not notify them afterwards (59.1%). Consequently, the 0.49% average annual skin tear rate from the imaging center survey is undoubtedly lower than the true rate. Nonetheless, even this conservative rate equates to approximately 194K skin tears annually in the United States (assumes 39,730,720 mammograms per year⁴).

Impact on Imaging Centers

Imaging center survey respondents cited many steps that must be taken when a skin tear occurs, including completing internal documentation, notifying other healthcare professionals and providing direct patient care.

Impact on Patients

Although many patients reported feeling positive after receiving a plan for how to care for their skin tear, many did not have the same positive feeling following the experience.



Breast Imaging Centers



Patient Perspective

The Scary Truth

The survey findings of how many women have either delayed or said they would not go back for another mammogram as a result of a skin tear are particularly troubling when looking at the responses from women under the age of 50:

- **20.8% had delayed their next mammogram**
- **12.5% said they would not go back for another mammogram**

Breast cancer in younger women is likely to be more aggressive, and younger women have worse survival rates compared to older women.⁵

Not only is there greater potential clinical impact on younger patients who delay or forego future mammograms because these cancers are more aggressive, but the younger the patient is when the skin tear occurs, the greater the impact on recurring revenue to the facility if the patient delays or foregoes future exams and procedures.

Patient Perception vs Imaging Staff Perception: Prevalence of Skin Tears

Both the patient survey and the imaging center survey revealed that the majority of skin tears are discovered at the facility. However, 35.1% of patients reported discovering the skin tear after leaving the facility, whereas staff reported only 22.6% of skin tears being discovered after the patient left, reflecting the finding that a majority of patients who discover their skin tear afterwards do not notify the facility. **An obvious conclusion from the two surveys is that there are many more skin tears than commonly thought.**

Patient Perception vs Imaging Staff Perception: How Skin Tears Affect the Patient

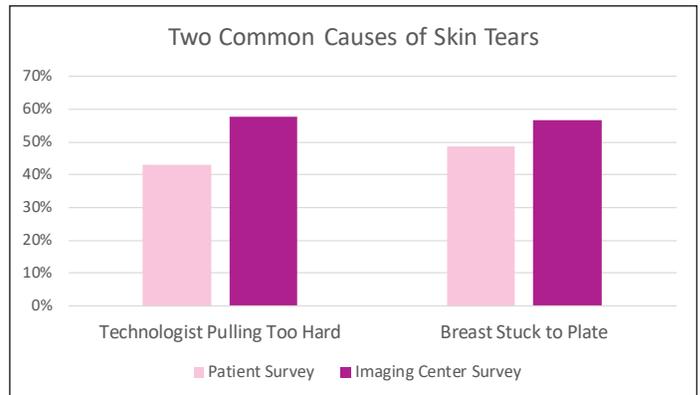
The way a patient truly feels when a skin tear occurs may be very different from what they convey to the technologist or other imaging center staff. Some may express their concern, whereas others may be reluctant to complain, thus leaving staff with the impression that patients simply accept the fact that a skin tear has occurred and it is “no big deal.” Healthcare professionals may mistakenly believe skin tears have minimal impact on clinical risk, compliance, patient volumes or future revenue to their facility. Conversely, it has been documented that:⁶

- Examination-related pain and anxiety affects patient satisfaction and adherence to future screenings.
- Women who are anxious about mammography tend to report more pain or discomfort during the procedure.
- The patient experience is derived from the perception of care.

How Can I Prevent Skin Tears?

Causes of Skin Tears

Both the patient survey and the imaging center survey showed an approximately even split between the two common causes of skin tears:*



* Respondents could choose both causes, as well as “Not Sure” (patients) or “Other” (imaging centers)

Protective Covers

An easy and effective way to minimize the occurrence of skin tears is to use a receptor plate cover. Receptor plate covers prevent the breast from sticking and help the technologist position the breast. Several respondents from the imaging center survey noted using covers:

“We ask the patient to remind us this happened and use Bella Blankets to help protect the patient.”

“We are using Bella Blankets and do not have skin tears.”

“We use [a cover] to reduce skin tears.”

“We use a protective [cover] with patients that have bad skin.”

Bella Blankets® protective coverlets (Beekley Medical®) help increase tissue acquisition, immobilize hard to position breasts, prevent breasts from sticking to receptor plate, shield cuts or infections in the inframammary fold, and act as a sanitary barrier.



References

- 1 A total of 790 patient responses were received from a blind survey conducted via Survey Monkey® (November 2019); two incomplete responses were excluded from the results.
 - 2 Blind survey distributed to breast imaging centers (November 2019-January 2020); interpretations and exclusions were made where responses to an individual question were not numeric (where required) or the question was misinterpreted.
 - 3 “The relaxed patient facilitates the technologist’s ability to utilize better positioning techniques to obtain more breast tissue, which provides a superior image to the radiologist for interpretation and diagnosis,” Shakira Sarquis-Kolber, RT(R), MBA; Kathy Schilling, MD; William J. Hanney, PT, PhD; Morey J. Kolber, PT, PhD. The Effect of Mammography Environment on the Patient Experience, Radiology Management, Nov/Dec 2019, retrieved from http://www.radiologymanagement-digital.com/radiologymanagement/november_december_2019/MobilePagedArticle.action?articleId=1542617&app=false#articleId1542617.
 - 4 U.S. Food and Drug Administration (FDA), MQSA National Statistics, retrieved from <https://www.fda.gov/radiation-emitting-products/mqsa-insights/mqsa-national-statistics>.
 - 5 Breastcancer.org, Do Young Women Have Worse Breast Cancer Outcomes? It Seems to Depend on the Cancer’s Characteristics, retrieved from <https://www.breastcancer.org/research-news/do-young-women-have-worse-outcomes>.
 - 6 Shakira Sarquis-Kolber, RT(R), MBA; Kathy Schilling, MD; William J. Hanney, PT, PhD; Morey J. Kolber, PT, PhD. The Effect of Mammography Environment on the Patient Experience, Radiology Management, Nov/Dec 2019, retrieved from http://www.radiologymanagement-digital.com/radiologymanagement/november_december_2019/MobilePagedArticle.action?articleId=1542617&app=false#articleId1542617.
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