UC Davis
Dermatology Online Journal

Title
Total body skin exams: the role of gynecology and dermatology-a cross-sectional study

Permalink
https://escholarship.org/uc/item/8pt9t1k7

Journal
Dermatology Online Journal, 28(3)

Authors
Kim, Joyce Y
Martin, Amylee
Stuparich, Mallory
et al.

Publication Date
2022

DOI
10.5070/D328357782

Copyright Information
Copyright 2022 by the author(s).This work is made available under the terms of a Creative Commons Attribution-NonCommercial-NoDerivatives License, available at
https://creativecommons.org/licenses/by-nc-nd/4.0/

Peer reviewed

eScholarship.org Powered by the California Digital Library
University of California

Total body skin exams: the role of gynecology and dermatology—a cross-sectional study

Joyce Y Kim[1] MD, Amylee Martin[2] BS, Mallory Stuparich[2] MD, Harry Dao Jr[3] MD

Affiliations: [1]Kaiser Permanente Los Angeles Medical Center, Los Angeles, California, USA, [2]School of Medicine, University of California Riverside, Riverside, California, USA, [3]Department of Dermatology, Loma Linda University Health, Loma Linda, California, USA

Corresponding Author: Harry Dao Jr MD FAAD, Associate Professor and Chair, Department of Dermatology, Loma Linda University Health, LLU Faculty Medical Group, 25865 Barton Road, Suite 101 Building D, Loma Linda, CA 92354, Tel: 909-558-2890, Fax: 909-558-2448 , Email: hadao@llu.edu

Abstract

The literature demonstrates practice gaps in performance of the genital skin examination. To further elucidate and understand these practice gaps, we surveyed dermatologist and obstetrician-gynecologist (OB/GYN) attending and resident physicians. Analysis of 73 dermatology survey responses revealed a lack of satisfaction with training received in examination of the female genitalia. Moreover, examination of 69 OB/GYN survey responses showed a lack of satisfaction with residency training received to identify high risk skin lesions. Interestingly, only 52.2% of OB/GYN respondents inspect perianal skin during pelvic region examinations. Our results highlight the need to improve residency training through standardization of breast/genitalia skin examinations during both dermatology and OB/GYN residency and for increased collaboration between specialties.

Keywords: breast, cancer, education, pelvic region, prevention, skin examination

Introduction

Total body skin examinations (TBSEs) are vital for detecting suspicious lesions on all skin surfaces. However, skin examination of genitalia and/or breasts may be limited by patient discomfort or expectations for certain medical specialties [1,2]. In a previous study, 84% of patients expected breast/genital skin to be evaluated by dermatologists, whereas 47% of the remaining participants expected such examinations to be performed by obstetrician-gynecologists (OB/GYNs), [2]. This observation in patient expectation raises the question—whose responsibility is it to identify high risk skin lesions of the breast and/or pelvic region and do the physicians feel comfortable doing so? Current Accreditation Council for Graduate Medical Education (ACGME) guidelines for dermatology practice do not standardize methods for examining breast/genitalia skin [3]. Conversely, OB/GYN doctors are well-trained in pelvic examinations but education on cutaneous disease or malignancy is limited [4]. Given that lack of standardized training may lead to practice gaps between specialties, we surveyed practicing dermatologists and OB/GYN doctors to understand the practice of conducting skin examinations of the breast and genitalia.

Discussion

This Institutional Review Board (IRB)-approved study (UCR IRB HS-20-091) involved the distribution of tailored surveys to dermatologists and OB/GYN doctors through the Association of Professors of Dermatology and program director email listservs. In order to capture the unique practice gaps and challenges regarding genital skin examinations for each specialty, different surveys were sent to dermatologists and OB/GYN doctors. A total of 73 dermatology and 69 OB/GYN survey responses were collected. Descriptive statistics and Pearson correlation coefficient were conducted in SPSS.

The large majority (97.3%) of dermatology respondents indicated they practiced in an academic setting and 67.1% of participants identified as female (**Table 1**). Dermatologists reported the frequency percentage of examining the male genitalia, female breast, and female pelvic region as 47.0%, 67.2%, and 36.1%, respectively. These findings demonstrate a large variability in examining certain anatomic areas and demonstrated the lack of a comprehensive TBSE for many patients. When indicating satisfaction with training received for examining male genitalia, female breast, and female genitalia, dermatology respondents averaged 3.89, 4.07, and 3.53, respectively (1=very dissatisfied, 5=very satisfied). When indicating level of agreement that such examinations should be performed primarily by other specialties, averages were 2.21, 1.92, and 2.92 for male genitalia, female breast, and female genitalia, respectively (1=strongly disagree, 5=strongly agree). Of the listed areas, the female pelvic region is associated with the lowest satisfaction in training and sparked the least sense of ownership/responsibility.

Table 1. *Dermatology survey responses (N=73).*

Gender, N (%)		
Female		57 (82.6)
Male		12 (17.4)
Professional status, N (%)		
Resident		21 (30.4)
Attending		48 (69.6)
Practice setting, N (%)		
Academic		66 (95.7)
Private		5 (7.2)
Group		5 (7.2)
HMO		0 (0)
Locum tenens		0 (0)
Rural		1 (1.4)
Urban		14 (20.3)
Suburban		6 (8.7)
Percentage of exams patient's skin thoroughly examined for pigmented lesions, mean±SD (%)		
Breast examination[a]		81.45±28.11
Pelvic examination[b]		84.49±22.72
Anatomic parts inspected during skin exam of pelvic region, N (%)		
Vulva		69 (100.0)
Vagina		62 (89.9)
Perineum		65(94.2)
Perianal		36 (52.2)
Confidence identifying high-risk skin lesions, mean±SD (1=not confident at all, 5 = extremely confident)		3.25±0.95
Satisfaction with residency training received to identify high-risk skin lesions, mean±SD *(1=very dissatisfied, 5= very satisfied)*		2.90±1.38
Percentage of patients in which biopsy performed for abnormal skin finding, mean±SD (%)		
Punch		48.91±37.83
Shave		7.72±16.31
	Breasts[a]	**Pelvic region[b]**
Percentage of patients requesting skin exam of anatomic region, mean±SD (%)	12.48±14.84	14.68±13.42
Agreement to statement that skin exams of the anatomic region should be performed primarily by physicians of other specialties, mean±SD (1=strongly disagree, 5=strongly agree)	2.57±1.17	1.64±0.89
Percentage of patients referred to dermatology for treatment of skin lesions in anatomic region, mean±SD (%)	38.43±40.30	12.45±17.10

[a]Encompassing nipple, areola, breast, under breast.
[b]Encompassing vulva, vagina, perineum, perianal area.

Table 2. *Obstetrician-gynecologist survey responses (N=69).*

Gender, N (%)			
Female			49 (67.1)
Male			24 (32.9)
Professional status, N (%)			
Resident			21 (28.8)
Attending			52 (71.2)
Practice setting, N (%)			
Academic			71 (97.3)
Private			5 (6.8)
Group			3 (4.1)
HMO			0 (0)
Locum tenens			1 (1.4)
Rural			1 (1.4)
Urban			8 (11.0)
Suburban			2 (2.7)
Percentage of male patients asked to remove undergarments[a] during TBSE, mean±SD (%)			47.0±37.4
Percentage of female patients asked to remove bra[a] during TBSE, mean±SD (%)			67.2±36.1
Percentage of female patients asked to remove underwear[a] during TBSE, mean±SD (%)			36.1±35.9
Anatomic parts inspected during skin exam of pelvic region, N (%)			
Vulva			66 (90.4)
Vagina			23 (31.5)
Perineum			53 (72.6)
Perianal			49 (67.1)
	Male genital exam, N (%)	**Female breast exam, N (%)**	**Female genital exam, N (%)**
Satisfaction with residency training for examining anatomic region, mean±SD (1=very dissatisfied, 5=very satisfied)	3.89±0.97	4.07±0.87	3.53±1.12
Agreement that skin exams of anatomic region should be performed primarily by physicians of other specialties, mean±SD. (1=strongly disagree, 5=strongly agree).	2.21±1.07	1.92±1.04	2.92±1.14

[a]Includes complete removal or asking to reveal portions of skin at a time.
TBSE, total body skin examination.

Obstetrician-gynecologists respondents also largely came from an academic (95.7%) practice setting and 82.6% identified as female (**Table 2**). Obstetrician-gynecologists reported an average frequency percentage of thoroughly examining the breast skin for pigmented lesions as 81.5% and the pelvic skin as 84.5%. Providers were then asked to select the anatomic areas that they inspect during a skin examination of the pelvis. This surprisingly demonstrated a low average of 52.5% of respondents stating that they inspected the perianal skin during pelvic region examination. Years of practice positively correlated with confidence level in identifying high risk skin lesions (R=0.436, P<0.01). Confidence, in turn, was positively correlated with frequency of conducting skin examinations of the breast (R=0.340, P<0.01) and pelvic region (R=0.468, P=0.01). Confidence also correlated with satisfaction of training in identifying these lesions (R=0.57, P<0.01). The measure of satisfaction demonstrated an average of 2.90 (1=very dissatisfied, 5=very satisfied), with 10.14% of respondents never having received such training. Agreement that pelvic and breast skin examinations should be performed primarily by other specialties was positively correlated with a higher frequency of dermatology referrals (breast R=0.299, P<0.05; pelvic R=0.289, P<0.05).

Study limitations include small sample size and predominance of respondents from academic settings. Inability to calculate response rate due to survey distribution method is a notable limitation. Nevertheless, our study provides further data to support a practice gap acknowledged by many

practicing dermatologists and OB/GYN doctors. Additionally, since different surveys were administered to dermatologists and OB/GYN doctors, the two groups could not be directly compared.

Conclusion

Results demonstrate inconsistency in the practice of TBSEs and a need for standardization in evaluating breast/genitalia skin during dermatology and OB/GYN residency training. Additionally, responses highlight the impact of training in physician confidence and quality of care given to patients. Increased collaboration between OB/GYN doctors and dermatologists via lectures, integrated clinical rotations, and/or interactive web-based modules may improve the quality of skin surveillance, improve confidence, and correct common pitfalls. Moreover, educating patients on the distinct need for breast/genitalia skin exams, apart from routine OB/GYN visits, may promote self-monitoring and normalization of such examinations by dermatologists.

Potential conflicts of interest

The authors declare no conflicts of interest.

References

1. Oliveria SA, Heneghan MK, Cushman LF, Ughetta EA, Halpern AC. Skin cancer screening by dermatologists, family practitioners, and internists: Barriers and facilitating factors. *Arch Dermatol*. 2011;147:39-44. [PMID: 21242390].
2. McClatchey Connors T, Reddy P, Weiss E, Kohn J, Liu M, Dao H. Patient comfort and expectations for total body skin examinations: A cross-sectional study. *J Am Acad Dermatol*. 2019;81:615-617. [PMID: 30528505].
3. ACGME. *ACGME Program Requirements for Graduate Medical Education in Dermatology*. https://www.acgme.org/specialties/dermatology/program-requirements-and-faqs-and-applications/. Accessed on May 27, 2022.
4. Comstock JR, Endo JO, Kornik RI. Adequacy of dermatology and ob-gyn graduate medical education for inflammatory vulvovaginal skin disease: A nationwide needs assessment survey. *Int J Women's Dermatol*. 2020;6:182-185. [PMID: 32637541].