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## Hair and Scalp Care in African American Women Who Exercise

There are notable disparities in physical activity (PA) levels among different racial and ethnic groups.<sup>1</sup> African American women comprise a population that deserves special focus because non-Hispanic black women participate in less PA than any other racial or ethnic sex group, yet have the highest prevalence of obesity and obesity-related conditions.<sup>2-4</sup> In a previous study by Hall et al,<sup>5</sup> 38% of black women avoided exercise at times owing to hair-related issues, and 50% modified their hairstyle to accommodate exercise. This present study sought to survey physically active black women to determine the most common hair care practices used to accommodate exercise, and provide recommendations for ideal regimens for hair and scalp care during and after exercise.

**Methods** | A 70-item questionnaire was administered to women at the completion of a 12-week community PA program consisting of biweekly seminars and group exercise sessions. The study was approved by the Wake Forest Baptist Health institutional review board. Written informed consent was obtained from all participants and they were not compensated for participating. Inclusion criteria included female sex, age of 21 to 75 years, and self-reported African, African Caribbean, or African American race. The questionnaire included sections on demographic information, hair- and scalp-related symptoms, hairstyles worn, and hair care in relation to PA. Descriptive statistics were performed using SAS statistical software (version 9.3; SAS Institute Inc). Analysis was performed from July 1 to December 22, 2015.

**Results** | Sixty-one women participating in a community PA program were included in the study. The mean (SD) age of participants was 52.3 (8.8) years. Most women classified their hair as normal (64%) or dry (29%). The most common symptoms were scalp itching (52%), hair breakage (41%), and scalp flaking (21%). Most women used over-the-counter (36%) or salon products (28%) to treat symptoms. Only 5 women used prescription topical or oral medications for hair- or scalp-related issues. Most participants washed their hair every 1 to 2 weeks, owing to dirtiness (47%), itchiness (33%), and dryness (16%). No significant differences were noted between women with self-reported dry or normal hair in the frequency of hair washing, hair and scalp symptoms, or hairstyles worn.

The most common hairstyles were natural and relaxed (46%). Nearly one-third of women modified their hair to accommodate exercise with natural hairstyles or braids. To preserve their hair during exercise, women wore a ponytail or bun (38%) or a scarf or hair wrap (31%). After exercise, women used these same hairstyles to style the hair with the most ease or did not style their hair (46%). The **Table** has more details.

**Table. Hair Care During and After Strenuous Physical Activity<sup>a</sup>**

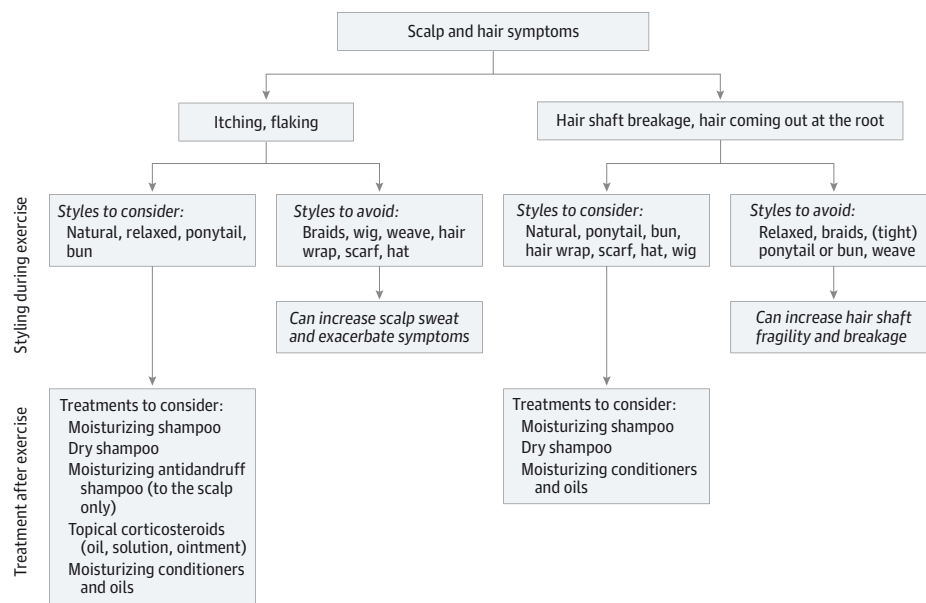
Characteristic	All Participants (n = 61)	Responses Based on Self-Reported Quality of Hair	
		Dry (n = 18)	Normal (n = 39)
Frequency of hair washing			
Daily	2 (3)	0	1 (3)
Every other day	4 (7)	0	4 (10)
Weekly	22 (36)	10 (55.6)	12 (31)
Every 2 weeks	24 (39)	5 (27.8)	17 (42)
Monthly	4 (7)	1 (5.6)	3 (8)
Less than monthly	4 (7)	2 (11.1)	2 (5)
Hair and scalp symptoms			
Itching	32 (52)	10 (55.6)	20 (51)
Flaking	13 (21)	4 (22.2)	8 (20)
Hair breakage	25 (41)	11 (61.1)	13 (33)
Hair coming out at root	8 (13)	5 (33.3)	2 (8)
Pain	3 (5)	0	3 (5)
None	15 (25)	2 (11.1)	13 (33)
Most common hairstyles worn			
Natural	28 (46)	8 (44)	20 (51)
Relaxed	28 (46)	10 (56)	17 (44)
Braided or locked	7 (11)	3 (17)	4 (10)
Weave or wig	8 (13)	4 (22)	4 (10)
Hot combed	12 (20)	4 (22)	8 (20)
Curled	3 (5)	1 (6)	2 (5)
Styles to preserve hair during exercise			
Ponytail or bun	23 (38)	6 (33)	15 (38)
Scarf or hair wrap	19 (31)	4 (22)	14 (36)
Hat	4 (7)	0	4 (10)
Nothing	32 (52)	13 (72)	18 (46)
Hairstyles worn after exercise			
Ponytail or bun	18 (29)	5 (28)	12 (31)
Scarf or hair wrap	12 (20)	1 (6)	6 (15)
Wash and dry	8 (13)	2 (11)	4 (10)
Nothing	28 (46)	11 (61)	17 (44)

<sup>a</sup> Data are given as number (percentage).

Most women (69%) did not experience worsening of hair or scalp symptoms with PA, but 18% of women stated that they exercised less than they would like because of their hair, because of sweating out hairstyles (18%) and the time needed to restyle hair (13%).

**Discussion** | This study surveyed women participating in a PA program, and thus sheds light on the experiences of physically active women. Scalp itching and hair breakage were common complaints and were largely treated with over-the-counter products. Dermatologists may provide a meaningful intervention by evaluating for and treating these symptoms. The **Figure** demonstrates basic components of an ideal hair care regimen for physically active women, based on their main hair

Figure. Ideal Hair Care During Strenuous Physical Activity Based on Hair and Scalp Symptoms



The ideal hair care during and after strenuous physical activity, based on the presence or absence of certain common scalp and hair-related complaints. Dermatologists can particularly play a role in providing suggestions for treatments after exercise.

or scalp issues. Even among physically active women, 18% exercised less than they would like because of their hair, but almost half of the women did nothing specifically to preserve their hair during exercise. This may be due to the high percentage of women wearing their hair in natural styles in this study. In our previous study,<sup>5</sup> older women tended to wear their hair in natural styles compared with younger women. Natural styles may allow for greater flexibility with exercise as long as maintenance routines are minimal. Future studies can further explore which hairstyles are best for preservation during exercise and a detailed postexercise management regimen, such as dry shampoos or other products.

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## OBSERVATION

### Cutaneous Presentation of Methicillin-Resistant *Staphylococcus aureus* Sepsis in a Healthy Child

Septic vasculopathy is a life-threatening condition that can present with cutaneous findings. We present a case of community-acquired methicillin-resistant *Staphylococcus aureus* (CA-MRSA) sepsis presenting as 2 retiform purpuric patches and diffuse erythematous to violaceous papules.

**Report of a Case |** A healthy male toddler presented to the emergency department with abdominal pain and distention,