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How Dry is "OAB-Dry"?: Perspectives from Patients and Physician Experts

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Abstract

Purpose—Overactive bladder (OAB) is subtyped into OAB-wet and OAB-dry, based on the presence or absence, respectively, of urgency incontinence. In order to better understand patient and physician perspectives on symptoms among women with OAB-wet and OAB-dry, we conducted patient focus groups and interviews with experts in urinary incontinence.

Materials and Methods—Five focus groups totaling 33 patients with OAB symptoms, including three groups of OAB-wet and 2 groups of OAB-dry patients, were conducted. Topics addressed patients' perceptions of OAB symptoms, treatments, and outcomes. Twelve expert interviews were then conducted in which experts were asked to describe their views on OAB-wet and OAB-dry. Focus groups and expert interviews were transcribed verbatim. Qualitative data analysis was performed using Grounded Theory methodology, as described by Charmaz.

Results—During the focus groups sessions, women screened as OAB-dry shared the knowledge that they would probably leak if no toilet is available. This knowledge was based on a history of leakage episodes in the past. Those few patients with no history of leakage had a clinical picture more consistent with painful bladder syndrome than OAB. Physician expert interviews revealed the belief that many patients labeled as OAB–dry may actually be mild OAB-wet.

Conclusions—Qualitative data from focus groups and interviews with experts suggest that a spectrum exists between very mild OAB-wet and severe OAB-wet. Scientific investigations are needed to determine if urgency without fear of leakage constitutes a unique clinical entity.

Keywords

focus groups; qualitative research; urge urinary incontinence; grounded theory; overactive bladder

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Introduction

In order to standardize terminology and better characterize symptomatology for patients, the term “overactive bladder” (OAB) has replaced previously used terms including urge incontinence, bladder instability, the unstable bladder, and frequency-urgency syndrome.[1, 2] OAB is defined by the International Continence Society as a urinary urgency, with or without urgency urinary incontinence, usually with frequency and nocturia.[2] According to the National Overactive Bladder Evaluation Program (NOBLE), which sampled 5,204 adults age 18 and over, the overall prevalence of OAB among women was 16.9%, and increased markedly after age 64.[3] There are two subtypes of OAB, OAB-dry (frequency and urgency without urgency incontinence) and OAB-wet (frequency and urgency accompanied by urge incontinence). Approximately 67% of patients with OAB have OAB-dry.[4] Although the overall prevalence of OAB is similar among men and women, women are more likely to experience OAB-wet (55.0% of women with OAB vs. 16.3% of men).[3] OAB has a clinically significant impact on quality of life, quality of sleep, and mental health in both men and women.[5] In order to identify differences in symptoms between women with OAB-wet and OAB-dry, we conducted patient focus groups. We then conducted interviews with physician experts in urinary incontinence in order to better understand their perspectives on differences in symptoms between OAB-wet and OAB-dry.

Materials and Methods

With the broader goal of assessing and improving the quality of care provided to women with OAB symptoms, we sought a qualitative research method to better understand patients’ experiences with OAB and how they perceive urgency. Specifically, focus groups permit a discussion of many topics while allowing for probing of certain topics further when needed. After Institutional Review Board approval was obtained, patients seen in the UCLA Female Urology clinics were identified by one of the following International Classification of Diseases codes (9th edition, ICD-9) for OAB symptoms: 788.31 (urge incontinence), 788.41 (urinary frequency), 788.43 (nocturia), and 788.63 (urgency of urination). After our screening phone call, patients with pelvic pain, interstitial cystitis/painful bladder syndrome, mixed stress and urgency incontinence, prolapse, recent pelvic surgery or surgical complications were excluded. Medical records were reviewed thoroughly in order to determine the presence of urgency and to separate OAB-dry and OAB-wet patients into different groups. This was done by perusing the records to assure that patients in the OAB-dry groups had no documented history of urgency incontinence. Patients were then contacted and asked to participate in a single focus group.

Non-clinician moderators conducted the 90-minute focus group sessions incorporating topics related to the patients’ perceptions of OAB symptoms, treatments, and outcomes. Separate focus groups took place for women with OAB-wet and OAB-dry. A semi-structured, open-ended script was used to allow patients to share their personal experience with symptoms and treatment, as previously described.[6] Topics for the focus group script were developed through reviews of the literature and validated questionnaires. These included questions about the effect of OAB on quality of life, triggers that lead to leakage, fear of leakage, and patient understanding of the disease, diagnostic testing, and treatments. Sessions were audiotaped and transcribed verbatim. The patients received a small honorarium for their time.

Constructivist Grounded Theory, as described by Charmaz, was used to analyze the data in the transcripts.[7, 8] Rather than testing a hypothesis, Grounded Theory aims to understand the research situation, and thereby discover the theory implicit in the data.[9] The researcher identifies key issues by coding and finding categories, which includes initial line-by-line

coding of transcripts using key phrases in the patient's own words. Next, similarly coded phrases are grouped together to create clusters.[10, 11] Then, preliminary themes are aggregated to develop categories. Finally, core categories or emergent concepts are derived from these themes. According to Constructivist Grounded Theory, the researcher is not merely an observer, but an active participant in the interview process and the development of the emerging theory.[7, 8] Four investigators, including non-clinician experts, separately performed line-by-line coding in order to diminish the potential for bias. Preliminary themes were then compared and merged. In our analyses, we specifically compared the experiences between women with OAB-wet and –dry.

After the focus groups were completed, twelve individual open-ended interviews with incontinence experts were conducted to assess their perceptions about OAB-dry and OAB-wet symptoms and their management strategies and views about diagnostic testing. They were also asked to describe their views on the current definition of OAB, specifically addressing OAB-wet and OAB-dry. Interviews with experts were conducted at the Society for Urodynamics and Female Urology (SUFU) annual meeting (Las Vegas, March of 2009) at the International Continence Society (ICS) meeting (San Francisco, October of 2009), and over the phone when necessary. Experts represented a wide range of disciplines, including urology, urogynecology, nursing, and geriatrics, and included members of SUFU, ICS, and the American Urogynecologic Society (AUGS). Experts were a sampling of different institutions and geographic locations across the world. Interviews ranged from 20–90 minutes. All transcripts were de-identified for analysis and transcribed verbatim. Qualitative methods using Grounded Theory, as described above, were used to analyze the transcripts.

Results

Patient Focus Groups

Extensive chart review was performed. Difficulty was encountered identifying pure OAB-dry patients in the clinical database. Five focus groups totaling 33 patients with OAB symptoms, including three groups of OAB-wet and two groups of OAB-dry patients, were conducted. Thematic saturation was achieved after five groups, in which no new themes emerged, so no further focus groups were held. Patient demographics are shown in Table 1. The OAB wet patients in the focus groups were, on average, ten years older than the OAB-dry patients (72 vs. 62 years).

Through line-by line coding, qualitative analysis yielded several preliminary themes, including strategies to control wetness, medications and side effects, and the impact of OAB on quality of life. The majority of focus group participants reported only a partial response to medication. The emergent concepts relating to the need for a chronic care approach to OAB and need for better communication with older women are reported separately.[6, 12] Two preliminary themes emerged that specifically related to urgency (Table 2). The first is that many women with "OAB-dry" actually had the same fear of leakage that women with OAB-wet experienced. During the focus groups sessions, women with OAB-dry shared that they felt they would leak if no toilet were available. This knowledge was based on a prior history of one or more leakage episodes, and most women in the OAB-dry focus groups wore light protective pads. The second preliminary theme was that women with no history of leakage and no fear of leakage had a different type of urgency that was characterized by uncomfortable urgency. Illustrative quotes describing these women's experiences are shown on Table 2. From these preliminary themes emerged the core concept that there were two distinct groups of patients with very different clinical entities who were categorized together as OAB-dry patients.

Expert Interviews

Physician expert interviews revealed the predominant belief that OAB–dry may be a mild form of OAB-wet. Representative quotes are detailed in Table 2. Many questioned the overall definition of OAB. One expert stated, "The previous definition of OAB included fear of leakage. I would have kept that in the definition." Our findings from expert interviews with physicians echoed the same themes found among patients: First, that OAB represents a spectrum of severity, from mild OAB with rare leakage ("OAB-dry") to severe OAB with frequent leakage ("OAB-wet"), and second, that there are two groups of patients with different clinical entities who are categorized together as OAB-dry; OAB with fear of leakage and OAB with urgency resulting in discomfort.

Discussion

Focus groups allowed us to better characterize patients' experiences with OAB-wet and OAB-dry and compare them with physician beliefs about OAB. Although many patients met criteria for OAB-dry by chart review, the majority of these women wore small pads because of fear of the possibility of leakage. Hence, these women were actually, by strict criteria, OAB-wet patients. Most of them had a history of at least one episode of leakage in the past. The fact that they were, for the most part, dry, may have been a function of their ability to get to a toilet quickly once the urge to urinate ensued. We postulate that many OAB prevalence studies may actually overestimate the prevalence of OAB-dry. This is based on the fact that many patients we grouped as OAB-dry actually had a fear of leakage and a history of a rare, but memorable, leakage episode in the past. The OAB-wet patient groups were on average, ten years older than those with OAB-dry. Though many factors have been shown to distinguish continent from incontinent older adults with OAB,[13] in some instances women who have more speed and agility, often the younger women, are more likely to reach the toilet before leakage occurs. Hence, it may be more accurate to consider OAB as a condition that has a spectrum of severity from mild to severe, rather than a condition with the definable subtypes dry and wet.

Women who never leaked appeared to have a different clinical condition, one of urgency that led to bladder discomfort, but without fear of leakage. Defining urinary urgency has caused a great deal of confusion among urologists and gynecologists.[14] Studies suggest that urgency is the core symptom of OAB in women.[15] However, urgency is not specific to any clinical entity, and can be the primary symptom in women with interstitial cystitis/painful bladder syndrome, OAB with leakage (OAB-wet), and OAB without leakage (OAB-dry). Some experts believe that it is appropriate to include both OAB-dry groups, those with fear of leakage and those with uncomfortable urge under the OAB umbrella. However, others feel it is inaccurate to use one term for two different conditions, each of which is experienced differently by those affected and is treated differently. Clearly scientific investigations are needed to determine if urgency in these two groups of patients involves the same neuromuscular mechanisms or different physiologic pathways.

Initial discussions among experts in the International Continence Society included "with the feeling of impending leakage" in the definition of OAB.[1, 16] However, the definition was modified to exclude the feeling of impending leakage from the definition. As a result, the present definition of OAB incorporates conditions other than detrusor overactivity. The 2004 ICS workshop regretted the elimination of the modifier "for fear of leakage" from the term urgency, defined as "a sudden compelling desire to void which is difficult to defer." [1, 16] Women with OAB-dry who never leak but are driven to void because of an uncomfortable or strong urge, by definition meet criteria for OAB. In addition, patients with polyuria, who have no detrusor overactivity but develop urgency after drinking high volumes of fluid or taking diuretics, also meet OAB criteria. Although the term OAB likely

allows for better patient understanding, it may lead to overtreatment of many women with anticholinergic medication- women who might better be served by behavioral modification, such as bladder training or fluid restriction, alone. Our findings lead us to question whether adding the "fear of leakage" modifier back to the definition of OAB might be more clinically meaningful.

Qualitative research methods allow us to better understand patients' experiences with OAB and how they perceive urgency. However, such methodology has limitations. First, the patients in our focus groups may not be representative of all patients with OAB. They were an older population, and, given that many were referred from specialty clinics, their symptoms may have been more severe than those of most people with OAB. Also, patients' treatment regimens and their success or failures with such treatments may have affected their perceptions. Despite identifying patients by ICD-9 codes and screening them by telephone call, it was not until deeper questioning that we revealed a remote history of leakage in the OAB-dry patients. Hence, the categorization of patients into OAB-dry and OAB-wet may have been inaccurate in some patients. However, the information obtained directly from patients and experts provides important perspectives that are not obtainable from traditional quantitative methods. Further qualitative research with other groups of patients with OAB, including men, women with less severe OAB, and underserved minorities, will shed light on the generalizability of our findings.

Conclusions

Qualitative data from focus groups and interviews with experts suggest that many women with OAB-dry may not, in fact, be truly dry. Rather, a spectrum may exist between very mild OAB-wet to more severe OAB-wet, and fear of leakage predominates. Scientific investigations are needed to determine if urgency without fear of leakage constitutes a unique clinical entity.

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Table 1

Focus Group Participant Demographics

Participant Characteristics		Number of Patients		
		Wet	Dry	Total
		24	**9**	**33**
Race	Asian	1	1	2
	Black	3	3	6
	Caucasian	20	5	25
Mean Age (range)		72 (51–91)	62 (39–84)	67 (39–91)
Median Age		72	61	70
Marital Status	Divorced	6	1	7
	Married	9	5	14
	Single	3	3	6
	Widowed	6	0	6
Previous Procedures	Interstim	4	0	4
	Botox	1	0	1

Table 2

Preliminary themes and illustrative quotes pertaining to those themes.

PATIENT PERSPECTIVES	
Preliminary theme	**Illustrative Quotes from "OAB-Dry" Patients**
Urgency with fear of leakage: OAB-Wet?	***"I feel like if I don't go to the bathroom, I will mess up my clothing, and if I'm in a meeting, that would be embarrassing. I have only had one occasion where that happened, when I stood up and thought, 'Oh, my gosh!'"*** ***"You feel that if you don't get to a bathroom you can lose it. I think that's what urgency is."***
Urgency causing discomfort	***"I think the pressure is the urgency. When I get the pressure I've gotta make a dash for the bathroom because it's very uncomfortable."***
PHYSICIAN EXPERT PERSPECTIVES	
Preliminary theme	**Illustrative Quotes Reflecting a Wide Variety of Opinions**
Urgency with fear of leakage	***"Technically if you've ever leaked, you would be considered to be OAB-wet, but I think the true OAB-wet patients are the ones with frequent leakage that affects their quality of life most."*** ***"It is all a matter of degree. If you get there in time you're OAB-dry. If you don't, you're wet."*** ***"We had a hell of a time finding true dry patients… It seems like the ones who will leak are the really true OAB-dry or maybe they're the early OAB-wet."***
Urgency causing discomfort	***"I find very few women who are completely OAB-dry. If they say, 'I've never leaked ever in my life,' they're usually a pain/hypersensitivity patient with urgency and frequency. With OAB-dry, you can usually get out of the history that they have had a leak at some point."*** *"A patient who has frequency and urgency but never leaks is different from the one who is fearful of not making it to the bathroom on time- Then I'm thinking of dry OAB."*