

A very important observation was made that none of the patients developed glomerulations on distention even though a second distension was done.

Glomerulations are not found in patients who are not suffering from frequency, urgency, and dysuria syndrome.

ICBR-63

To Study the Effect of Hydrodistention on Bladder Mucosa and Submucosa

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Hydrodistention is a basic diagnostic and therapeutic modality for interstitial cystitis (IC). This objective of this prospective study was to find out if hydrodistention causes any changes in bladder mucosa and submucosa.

This study extended from October 1998 to August 2000. A total of 48 patients (25 men, 23 women) were included in the study: 21 patients had IC; 2 had eosinophilic cystitis; 9 had chronic prostatitis; 4 patients had symptoms similar to IC but did not develop glomerulations on scopy (occult IC); 9 patients had some urological disease other than frequency, urgency, and dysuria. The 3 remaining patients had diseases other than urological diseases. The age of patients ranged was from 19 to 70 years. Under anesthesia patient were scoped with a 21-Fr scope. Cold cup biopsy was taken as soon as bladder started filling (approximately 100 mL of fluid inside the bladder). The bladder was then filled to capacity at 80 cm of reservoir height, drained, and then distended again. The second distention was maintained for 3 minutes and the bladder was then drained again. A second cold cup biopsy was taken after draining the bladder a second time. Both the biopsies were studied by a pathologist after staining with hematoxylin and eosin (H&E).

There was no difference in predistention and posthydrodistention biopsy in any of the groups. The following parameters were studied: number of layers of bladder mucosa, submucosal edema, infiltration of submucosa by lymphocytes and/or plasma cells, and vascularity and/or congestion of the submucosa.

Hydrodistention does not cause any changes in the bladder mucosa and submucosa on histology examination on H&E staining.

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Concordance of Interstitial Cystitis (IC) in Identical Twins: Preliminary Data

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This study was funded by the Fishbein Foundation

If a disease is genetic, the closer the biologic relationship to an index case, the higher the prevalence of the disease. This is because monozygotic twins share all their genes; first-degree relatives (parents, siblings [including dizygotic twins], children) share half; second-degree relatives (aunts, uncles, nephews, nieces) share one fourth; and third-degree relatives (first cousins) share one eighth of their genes. Funded by the Fish-

bein Foundation, we collaborated with the Interstitial Cystitis Association (ICA) in performing a family survey of ICA members in the summer of 1999. Of the 2581 ICA respondents, 50 noted they were one of a pair of twins. We reproduced the methodology of Curhan *et al.* (*J Urol* 1999; 161:549) to define IC (see Table 1).

TABLE I. Fishbein/ICA survey respondents who are twins

	Respondents (n)
Report their twin survived childhood	45
Report cystoscopy done	44
Medical release of information	39
Cystoscopy report received	39
Meet Curhan criteria	34

The 34 responding twins who met Curhan criteria were distributed as shown in Table 2.

TABLE II. Distribution of respondent twins (N = 34)

	Monozygotic Twins (n = 9)	Dizygotic Twins (n = 25)
Twin with IC symptoms	5	0
Twin with "confirmed" IC	4	0

IC = interstitial cystitis.

This strong concordance among identical twins and not fraternal twins suggests a genetic susceptibility to IC. (Note: we have confirmed Curhan criteria only in the ICA respondent twins; we are waiting approval from our Institutional Review Board to address the twins of these respondents.) One might ask why all of the monozygotic twins do not have IC. If IC were entirely a genetic disease, then indeed we would expect 100% of monozygotic (and 50% of dizygotic) twins to be concordant. If the disease were entirely nongenetic, we would expect concordances among monozygotic and dizygotic twins to be roughly equal (and much less than 100%). However, if, like most diseases, IC is multifactorial and genetics contributes to susceptibility to IC, a given individual may or may not develop IC depending on environmental factors. For instance, the concordance rates for monozygotic versus dizygotic twins are 30% vs 6% for insulin-dependent diabetes mellitus and 46% vs 14%, for schizophrenia.

ICBR-65

Fishbein/Interstitial Cystitis Association (ICA) Survey of Interstitial Cystitis Among Family Members of ICA Members: Preliminary Analysis

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This study was funded by the Fishbein Foundation

The first real evidence that genetic factors are important in a disease usually comes from genetic epidemiology studies comparing the prevalence of that disease among family members of