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URINARY TRACT INFECTION: A RED FLAG TO PREVENT UNINTENDED PREGNANCY IN ADOLESCENCE?

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Background and Aims:

Various studies have linked sexual intercourse with urinary tract infection (UTI) in women. We aim to investigate whether UTI is associated with sexual activity and increased odds of pregnancy in adolescents.

Methods:

Retrospective analysis of data from female adolescents aged 12–15 years old who visited a pediatric emergency department (ED) from 2010–2012 for suspected UTI. Patients were classified into two groups according to the results of the urine culture: UTI positive and UTI negative. We compared the occurrence of pregnancy among the two groups at the ED visit and within the following two years. Crude and age-adjusted odds ratios (aORs) with 95% confidence interval (CI) were pooled when appropriate.

Results:

Of 385 female adolescents who met the study criteria, 92 (23.9%) were UTI positive and 293 (76.1%) were UTI negative. At the ED visit, pregnancy rates were higher among adolescents of the UTI-positive group versus those of the UTI-negative group (9.8% vs. 2.4%; aOR: 3.42; 95% CI: 1.21–10.00). Over the following two years, adolescents of the UTI-positive group experienced higher incidents of pregnancy compared with the UTI-negative group (14.5% vs. 4.5%; aOR: 2.89; 95% CI: 1.23–6.75).

Table 1. Frequencies, crude and age-adjusted odds ratios (with 95% confidence intervals (CI)) for pregnancy according to urinary tract infection (UTI) diagnosis at baseline

Subgroup	UTI positive	UTI negative	Crude OR	Adjusted OR
	No. of events/no. at risk		(95% CI)	(95% CI)
Pregnancy at presentation	9/92 (9.8%)	7/293 (2.4%)	4.43 (1.60–12.74)	3.42 (1.21–10.00)
Pregnancy during follow-up*	12/83 (14.5%)	13/286 (4.5%)	3.55 (1.53–8.16)	2.89 (1.23–6.75)
Total pregnancies at presentation or follow-up	21/92 (22.8%)	20/293 (6.8%)	4.04 (2.07–7.90)	3.27 (1.65–6.53)

* (Excludes those with pregnancy at presentation.) OR = odds ratio.

Conclusions:

We observed increased odds of pregnancy among adolescents presenting to the ED with a confirmed UTI episode. Our findings suggest that the diagnosis of UTI in the ED represents an opportunity to detect pregnancy and to prevent further unintended pregnancy in adolescence.

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