

Incidence of Chlamydia, Gonorrhea, and Azithromycin Resistant Chlamydia in an Adolescent Population

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INTRODUCTION: Our practice sees women of all ages. In this retrospective analysis, we looked at our population of adolescents, including ages 12-17. All patients received gonorrhea and chlamydia testing on at least one occasion. In a retrospective chart review we reviewed 25 charts of children in this age group and compared the incidence, demographics and frequency of Azithromycin resistant chlamydia in a randomized matched subset of "control" adult charts.

PURPOSE: We set out to see if adolescent women in our practice were at higher risk of contracting gonorrhea and chlamydia, and when they do contract these disease, we sought out to see if they would be at higher risk than our adult population of acquiring strains that were resistant to common treatments, most notably azithromycin.

MATERIALS AND METHODS: We performed a randomized retrospective chart review of 42 pediatric patients seen at our offices. All of these patients received gonorrhea and chlamydia testing one at least one occasion in our offices. We then matched this group with an equal number of adult patients that were seen in our offices during the same time period, for similar symptomology, (or lack thereof.) We compared gonorrhea and chlamydia rates in the two populations and the difference in rates of drug resistance in those with positive tests.

RESULTS: We found a slightly decreased rate of infection with gonorrhea and chlamydia in our test population of pediatric patients (2% vs. 4%). We also found a zero percent rate of resistance to antibiotics in our pediatric population, compared to a low, but statistically significant higher rate in our matched adult cohort group.

CONCLUSION: Our data sample is small, but initial evidence suggests that the infection rate of adolescents with gonorrhea and chlamydia may be lower than the adult population when presenting to an urban Obygn practice with similar symptomology. When they are positive, there may also be a lower rate of drug resistant strains. Logically, this follows that fewer and less virulent strains may be associated with the adolescent population as opposed to the adult population. This data in no way compromises the value of sexual education counseling provided to pediatric populations, but useful when counseling young women who may be concerned that adolescent experimentation may have affected their fertility. We plan to continue our analysis with a prospective cohort study to achieve higher quality data on the subject.

Gonorrhea and Chlamydia remain the most commonly diagnosed sexually transmitted infections of adolescence, however, to the knowledge of the authors there has been very little data as to differences in the characteristics of these infections in the pediatric population versus the adult population. With a small population of pediatric and adult female patients in an urban Arizona city, we set out to see if any differences would come to light in our retrospective analysis.

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