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## Enhancing the ED Approach to Pediatric Sexual Assault Care: Implementation of a Pediatric SART Program

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### Abstract

**Objective**—Describe the experience of a novel pediatric Sexual Assault Response Team (SART) program in the first three years of implementation, and compare patient characteristics, evaluation, and treatment among subpopulations of patients.

**Methods**—Retrospective chart review of a consecutive sample of patients evaluated at a pediatric ED who met institutional criteria for a SART evaluation. Associations of evaluation and treatment with gender, menarchal status, and presence of injuries were measured using logistic regression.

**Results**—One hundred and eighty-four patients met criteria for SART evaluation, of whom 87.5% were female; mean age was 10.1 years (+/- 4.6 years). The majority of patients underwent forensic evidence collection (89.1%), which varied by menarchal status among females ( $p < 0.01$ ), but not by gender. Evidence of acute anogenital injury on physical exam was found in 20.6% of patients. As per the Center for Disease Control and Prevention guidelines for acute sexual assault evaluations in pediatric patients, menarchal females were more likely to undergo testing for sexually transmitted infections (STI) and pregnancy ( $p < 0.01$ ) and to be offered pregnancy, STI, and HIV prophylaxis ( $p < 0.01$ ).

**Conclusions**—In an effort to improve quality and consistency of acute sexual assault examinations in a pediatric ED, development of a SART program supported the majority of eligible patients undergoing forensic evidence collection. Furthermore, a substantial number of patients had evidence of injury on exam. These findings underscore the importance of having properly trained personnel to support ED care for pediatric victims of acute sexual assault.

### INTRODUCTION

Nationally, adolescents and young adults have the highest rates of sexual assault of any age group, and it is likely that, due to underreporting, the statistics underestimate the true rate of victimization.<sup>1</sup> According to the 2009 Youth Risk Behavior Surveillance Survey, 10.5% of female high school students and 4.5% of male high school students reported being forced to have sexual intercourse.<sup>2</sup> Additionally, Saltzman and colleagues analyzed data from the National Electronic Injury Surveillance System and found that pre-adolescents and

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adolescents are more frequently evaluated after a sexual assault in the emergency department (ED) than people of other ages; of note, rates of visits for males were highest in the pre-adolescent group compared to females, where the highest rate was in the adolescent group.<sup>3</sup>

Despite the frequency of ED visits for care after sexual assault, several authors have found that ED care of victims of sexual assault is suboptimal.<sup>4-6</sup> Given the complexities of caring for pediatric sexual assault victims, one option that may improve the examination and management of these patients is a sexual assault response team (SART). Existence of these teams, which are typically comprised of specially trained nurse examiners who follow specific protocols, have been demonstrated to shorten time to evaluation, increase consistency of STI and pregnancy testing and prophylaxis, and increase the rate of forensic evidence collection.<sup>7, 8</sup> However, few SART programs have been designed specifically for pediatric patients.<sup>7</sup> Our institution developed and implemented a SART program aimed at pediatric patients through the age of 15 years. Development of the program included writing protocols for evaluation and treatment of patients, obtaining appropriate equipment, training specialized nurse examiners, and educating the entire ED staff (physicians, nurses, ED technicians, child life workers and social workers) around the care of the acutely sexually assaulted patient. The training provided has been based on standard pediatric sexual assault nurse examiner certification trainings. The SART program is coordinated and administered by an ED pediatric nurse practitioner, and additional oversight for the program is provided by a multi-disciplinary team consisting of faculty in emergency medicine and general pediatrics (with expertise in child abuse), social workers, child life specialists, pediatric emergency medicine nurses, and administrative staff. Once a patient meets criteria for a SART evaluation, a structured history is obtained (for patients who are referred to the ED from the special victims unit simply for a medical evaluation, a more limited history is obtained); a complete physical exam is performed with photodocumentation; pain control is provided as needed; and forensic evidence is collected, if indicated. Furthermore, as indicated for individual cases, STI, pregnancy, and drug testing is conducted; prophylaxis is offered; medical treatment is provided; and Department of Human Services and police reports are filed. Finally, all patients evaluated by the SART are provided with psychological and mental health resources, follow up with our hospital's Child Abuse, Referral and Evaluation (CARE) clinic, along with follow up with their primary care provider. As part of our quality improvement process, all cases are reviewed by pediatric child abuse specialists with continual feedback and coordination of patient care in follow-up.

The purpose of this manuscript is to describe the experience of our SART program in the first three years of implementation, and to compare patient characteristics, evaluation and treatment among various subgroups, such as pre-pubertal and post-pubertal patients and males and females.

## METHODS

This study was a retrospective cross-sectional review of a consecutive sample of patients who qualified for a SART evaluation from July 9, 2008 and July 9, 2011 in a single, urban, tertiary care, free standing children's hospital emergency department. Inclusion criteria consisted of meeting criteria for a SART evaluation. At our institution, patients are evaluated by SART if the assault has occurred within 24 hours (pre-pubertal patients) or 72 hours (post-pubertal patients), if the patient has genitourinary complaints or signs of anogenital injury on exam, or if the patient was referred by law enforcement or child protective services for forensic evidence collection. This study was determined to be exempt by our hospital's Institutional Review Board as it involved analysis of an existing quality improvement database.

Patient charts were reviewed for demographic information, sexual assault information, and ED evaluation details. Abstraction of demographic information included patient age, gender, race/ethnicity, menarchal status if female, and insurance type (private, public, self pay/no insurance). Abstraction of sexual assault information included time elapsed since assault, recollection of event, concern for drug-facilitated sexual assault, number of perpetrators, report of penetration, report of symptoms and symptom type, and caregiver accompanying patient to ED. ED evaluation information included ED length of stay (LOS), whether forensic evidence was collected, presence of injury on exam and type of injury, laboratory studies obtained and medications provided. Injuries were classified as either diagnostic/due to acute trauma or indeterminate, using the criteria described by Adams and colleagues.<sup>9</sup> In the setting of disclosure of abuse, indeterminate findings such as erythema of the labia were classified as “concerning.” Charts were independently abstracted by three abstractors (MG, CM, and KH). 10% were double abstracted to evaluate for consistency. When questions arose on chart abstraction, charts were reviewed by all 3 abstractors until consensus was achieved.

Descriptive statistics were used to summarize demographic variables, including means, medians, standard deviations, and ranges for continuous variables, and frequencies for categorical variables. Comparisons between covariates and gender, menarchal status, and presence or absence of injuries were made using the chi-square test. Logistic regression modeling was performed to calculate odds ratios for relationships between outcome variables and specific co-variables. Data were analyzed using STATA 12.0 (College Station, Tx). Statistical significance was defined as a p-value <0.05.

## RESULTS

During the first three years of the program, 184 pediatric victims of acute sexual assault were evaluated by the SART in our ED. The demographics of our study population are shown in Table 1. Most patients were female (87.5%) and mean age was 10.1 (SD +/- 4.6) years. However, there was a wide distribution of ages, with peaks around ages 3 years and 12–13 years (Figure 1). The majority of evaluated patients were of Black race (76.4%), reflecting our ED racial demographics. Of the 170 verbal patients, 11.7% could not recall the event; no recollection of sexual assault was associated with concern for drug facilitated sexual assault (OR 57.7, 95% CI 15.3, 217.6). Of the 184 evaluated patients, 65 (35.3%) had evidence of injury on exam: 31 with genital injuries consistent with acute assault; 14 with genital injuries concerning for, but not diagnostic of acute assault; 9 with extragenital injuries only; 7 with extragenital injuries and genital injuries consistent with acute assault; and 4 with extragenital injuries and genital injuries concerning for, but not diagnostic of, acute sexual assault. Types of extragenital injuries included minor injuries to the extremities, torso, and/or head and neck.

The mean time of presentation to ED since assault event was 16.9 hours (SD +/- 16.6), and this time differed by age, gender, and among females, also by menarchal status. Patients less than 10 years of age (mean 12.0 hours) presented to the ED earlier than patients 10 years and older (mean time 19.5 hours) ( $p < 0.01$ ). Furthermore, males (mean=8.1 hours) were more likely to present to the ED earlier after acute assault than females (mean=18.1 hours) ( $p = 0.02$ ) (Tables 2 and 3). Among females, mean time to presentation was 12.6 hours (+/- 9.8) for premenarchal patients, and 22.1 hours (+/- 20.2) for menarchal patients ( $p < 0.01$ ) (Table 2). Time to ED presentation did not differ by patient race/ethnicity ( $p = 0.18$ ) or insurance type ( $p = 0.68$ ). Over 50% of the patients were symptomatic after the assault, with genital symptoms being the most common complaint (Table 1). Menarchal females were more likely to report the presence of any post-assault symptoms than premenarchal females (OR 2.8; 95% CI 1.5, 5.4).

Table 2 describes patient evaluation by menarchal status for females and Table 3 describes ED evaluation for males. Forensic evidence was collected in 89.1% of the study population (88.2% of the females, 95.6% of the males). Of the patients who did not undergo forensic evidence collection, reasons for not collecting evidence were the following: 7 patients reported “touching with hands or fingers only; 1 patient changed her history; 3 patients did not undergo an examination (2 refused exam and 1 could not tolerate the exam); 6 patients did not meet our institutional time frame guidelines for evidence collection; and 2 patient charts had insufficient information to describe the reason. There were no statistically significant differences in forensic evidence collection by gender ( $p=0.31$ ). Menarchal females, however, were more likely to undergo forensic evidence collection than premenarchal females (OR 7.3, 95% CI 2.0, 26.4). As per the Center for Disease Control and Prevention (CDC) guidelines for acute sexual assault evaluations in pediatric patients,<sup>10</sup> menarchal females were more likely to undergo testing for sexually transmitted infections (STI) (OR 2.1; 95% CI 1.1, 3.9), HIV (OR 4.4; 95% CI 2.4, 8.2) and pregnancy (OR 2.6; 95% CI 1.6, 4.3) and to be offered pregnancy (OR 2.9; 95% CI 1.8, 4.8), STI (3.9; 95% CI 2.3, 6.7), and HIV prophylaxis (4.1; 95% CI 2.4, 7.0). Of the 10 prepubertal patients who received STI prophylaxis, 2 had genital injuries consistent with acute sexual assault; 2 had genital injuries concerning for acute sexual assault; 1 had evidence of semen exposure; 5 had unknown reasons. Performance of STI testing ( $p=0.17$ ) and HIV testing ( $p=0.06$ ) did not differ by male patient age, although provision of STI prophylaxis was more likely among males >12 years old (OR 7.5, 95% CI 1.02, 55.0) than younger males. Additionally, of the 94 patients offered STI prophylaxis, 2 (2.1%) refused. In contrast, of the 102 patients who were offered HIV post-exposure prophylaxis (PEP), 16 (15.7%) refused. Furthermore, of the 81 females offered emergency contraception, 4 (4.9%) refused. Of the 148 patients who underwent STI testing, 15 patients were infected with an STI. Of these, 9 patients were infected with chlamydia, 2 patients were infected with gonorrhea, 1 patient with trichomonas and chlamydia, and 3 patients with both gonorrhea and chlamydia. No tested patients had a reactive HIV or syphilis test.

Thirty percent of patients ( $n=56$ ) had an abnormal anogenital exam; 20.6% ( $n=38$ ) had injuries consistent with acute assault, while another 9.8% ( $n=18$ ) had an anogenital exam that was concerning for acute assault, but not diagnostic, per Adams criteria.<sup>9</sup> Of Table 4 compares ED evaluation by presence or absence of injuries diagnostic for acute assault. There was no statistically significant difference in mean time to ED presentation by presence or absence of anogenital injury diagnostic for acute assault ( $p=0.34$ ). Approximately 20% ( $n=32$ ) of females had presence of anogenital injuries consistent with acute assault on evaluation, while another 6.8% ( $n=11$ ) had exams concerning for, but not diagnostic of, acute sexual assault. Of the 23 males evaluated by the SART during the study period, 26.1% had evidence of assault-related injury and another 21.7% ( $n=5$ ) with an anogenital exam concerning for, but not diagnostic of, assault-related injury. There were no statistically significant differences in presence of assault-related anogenital injury by gender ( $p=0.52$ ), although injuries to the anus were more likely to be found among males than females (OR 11.0, 95% CI 3.0, 39.9). Furthermore, presence of assault-related injury was more likely to be present among menarchal (OR 2.1, 95% CI 1.2, 3.6) than premenarchal females, although no differences were observed between males <12 years of age and males ≥12 years old ( $p=0.86$ ). There was no statistically significant difference in presence of assault-related anogenital injury by patient race/ethnicity ( $p=0.86$ ), or insurance status ( $p=0.80$ ). Patients with evidence of assault-related injury on anogenital exam were more likely to undergo forensic evidence collection ( $p=0.02$ ), undergo STI testing (OR 5.6, 95% CI 1.3, 24.5), and be offered STI prophylaxis (OR 4.0, 95% CI 1.8, 9.0) and HIV PEP (OR 3.8, 95% CI 1.6, 8.9).

Furthermore, reported history of penile-anogenital penetration was associated with STI testing (OR 7.9, 95% CI 2.4, 25.9). Similarly, patients who reported penile-anogenital penetration were more likely to be offered STI prophylaxis (10.0, 95% CI 4.3, 23.0) and HIV PEP (17.4, 95% CI 7.1, 42.7). Pubertal female patients who reported penile-anogenital penetration were also more likely to be offered emergency contraception (OR 10.1, 95% CI 2.1, 49.9).

## DISCUSSION

The emergency care of the sexual assault victim can be challenging, as these patients require extensive evaluation, often involving forensic evidence collection, and may need multiple tests and medications prior to discharge. In addition, given the potential for involvement of the court system for these patients, it is crucial that information be collected in a systematic, careful way, and that documentation is clear and thorough.<sup>11, 12</sup> However, several authors have demonstrated that the ED care of these patients can be less than ideal. For example, Rovi and Shimoni analyzed data from the National Hospital Ambulatory Medical Care Survey (NHAMCS) for 1994–1999 and found that none of the identified cases of sexual assault were provided the full regimen of antibiotics for STIs recommended by the CDC<sup>5</sup>. Similarly, through analysis of 2003 NHAMCS data, Straight and colleagues found that only 7% of ED visits for a sexual offense results in appropriate antibiotic prophylaxis.<sup>6</sup> When considering the pediatric patient specifically, Merchant and colleagues reviewed the medical records of adolescent patients (ages 12 through 17 year) seeking care for sexual assault in 11 Rhode Island EDs, and found that many patients did not receive the American Academy of Pediatrics recommended tests and prophylaxis; only 32.8% of girls and no boys received all the recommended care. In addition, they noted that boys received fewer tests than girls and that testing and prophylaxis varied by the type of ED.<sup>4</sup> Clearly, there is a need to improve and standardize the care provided to pediatric victims of sexual assault.

In contrast to the above findings, with the implementation of a developmentally appropriate, pediatric-focused SART program we were able to provide recommended screening and prophylaxis to the majority of patients presenting to our ED. As would be expected, older female patients were more likely to be offered STI prophylaxis than younger patients. Interestingly, testing and prophylaxis were not affected by presence of injury. As many pediatric victims of sexual assault will not have evidence of injury on exam,<sup>13, 14</sup> it is important that care not vary based on these findings. In fact, in our population, just over one-third of the patients had injuries noted at the time of the ED visit; higher than what has been previously reported in the literature, which has ranged from 21–24%.<sup>7, 15</sup>

During the first three years of our SART program, we evaluated almost 200 patients, amounting to just over one patient per week. Compared with other pediatric diagnoses, such as asthma and head trauma, this complaint is not common. Because ED providers may not care for such patients often, having a dedicated program with trained practitioners, particularly for evidence collection, can significantly improve and standardize care, as described above. Of particular note is that approximately 90% of our patients had evidence collected, which can be challenging in the pediatric patient due to issues around developmental stage, cooperation, and pain management.

There are several limitations to this study. Because our data were collected retrospectively, there is the potential for misclassification or bias due to missing data. However, we attempted to limit misclassification by using a small number of abstractors and by having dual abstractors for a subset of charts in order to identify areas of potential disagreement. Additionally, data, such as injuries, were abstracted just as it appeared in the chart, without additional verification. However, the majority of data, such as the demographics, the tests

ordered and the medications given, were available via electronic medical record and therefore were unlikely to be in error. Furthermore, we are unable to report patient outcomes as we did not have access to rape kit results or legal outcomes.

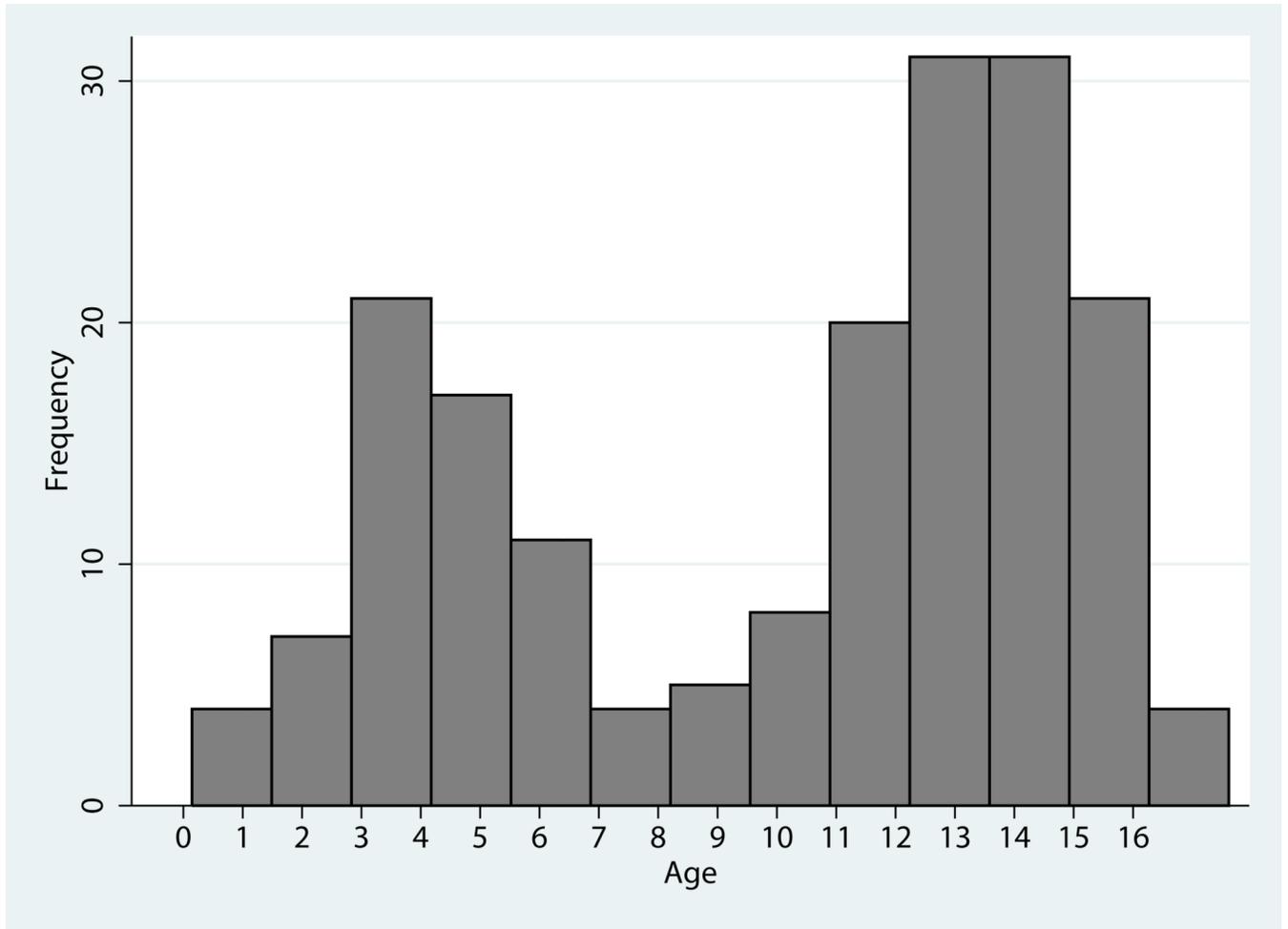
In conclusion, over the first three years of our SART program, we evaluated just under 200 pediatric victims of acute sexual assault. The majority of patients underwent forensic evidence collection and received appropriate STI and pregnancy testing and prophylaxis. Future studies should evaluate the impact of a sexual assault program on the care of pediatric sexual assault patients.

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## REFERENCES

1. Rand, M. Bureau of Justice Statistics Bulletin. Washington, DC: US Department of Justice; 2008. Criminal Victimization, 2007.
2. Prevention CfDCA. Youth risk behavior surveillance-United States, surveillance summaries, 2009. Morbidity and mortality weekly report. 2010; 59(no. SS-5)
3. Saltzman LE, Basile KC, Mahendra RR, Steenkamp M, Ingram E, Ikeda R. National estimates of sexual violence treated in emergency departments. *Ann Emerg Med.* 2007; 49(2):210–217. [PubMed: 17145110]
4. Merchant RC, Kelly ET, Mayer KH, Becker BM, Duffy SJ, Pugatch DL. Compliance in Rhode Island emergency departments with American Academy of Pediatrics recommendations for adolescent sexual assaults. *Pediatrics.* 2008; 121(6):e1660–e1667. [PubMed: 18519469]
5. Rovi S, Shimoni N. Prophylaxis provided to sexual assault victims seen at US emergency departments. *J Am Med Womens Assoc.* 2002; 57(4):204–207. [PubMed: 12405238]
6. Straight JD, Heaton PC. Emergency department care for victims of sexual offense. *Am J Health Syst Pharm.* 2007; 64(17):1845–1850. [PubMed: 17724367]
7. Bechtel K, Ryan E, Gallagher D. Impact of sexual assault nurse examiners on the evaluation of sexual assault in a pediatric emergency department. *Pediatr Emerg Care.* 2008; 24(7):442–447. [PubMed: 18580706]
8. Sampsel K, Szobota L, Joyce D, Graham K, Pickett W. The impact of a sexual assault/domestic violence program on ED care. *J Emerg Nurs.* 2009; 35(4):282–289. [PubMed: 19591721]
9. Adams JA, Kaplan RA, Starling SP, Mehta NH, Finkel MA, Botash AS, et al. Guidelines for medical care of children who may have been sexually abused. *J Pediatr Adolesc Gynecol.* 2007; 20(3):163–172. [PubMed: 17561184]
10. Berman SM. Centers for Disease Control & Prevention WK. Sexually transmitted diseases treatment guidelines 2010. *MMWR.* 2010:1–116. [PubMed: 21160459]
11. Kaufman MatCoA. Care of the adolescent sexual assault victim. *Pediatrics.* 2008; 122:8. [PubMed: 18595980]
12. Kellogg N. The evaluation of sexual abuse in children. *Pediatrics.* 2005; 116(2):506–512. [PubMed: 16061610]
13. Girardet R, Bolton K, Lahoti S, Mowbray H, Giardino A, Isaac R, et al. Collection of forensic evidence from pediatric victims of sexual assault. *Pediatrics.* 128(2):233–238. [PubMed: 21788219]
14. Thackeray JD, Hornor G, Benzinger EA, Scribano PV. Forensic evidence collection and DNA identification in acute child sexual assault. *Pediatrics.* 128(2):227–232. [PubMed: 21788217]
15. Murphy SB, Potter SJ, Stapleton JG, Wiesen-Martin D, Pierce-Weeks J. Findings from Sexual Assault Nurse Examiners (SANE): A case study of New Hampshire's pediatric SANE database. *J Forensic Nurs.* 6(4):163–169. [PubMed: 21114757]



**Figure 1.**  
Age Distribution of Study Population

**Table 1**

## Patient Demographics

Demographic		N (%)
Gender	Female	161 (87.5%)
	Male	23 (12.5%)
Race	Black	141 (76.6%)
	White	27 (14.7%)
	Hispanic	12 (6.5%)
	Other	4 (2.2%)
Mean age in years (+/- SD)		10.1 (4.6)
Payor Status	Private Insurance	111 (60.3%)
	Public Insurance	69 (37.5%)
	Self-Pay	4 (2.2%)
Brought By	Parent	149 (81.0%)
	EMS	2 (1.1%)
	Police	9 (4.9%)
	Social Worker/Case Worker	6 (3.3%)
	Other	18 (9.7%)
	Symptoms	Any Symptoms
Genital (n=182)		65 (35.7%)
Dysuria (n=182)		17 (9.3%)
Abdominal Pain (n=182)		30 (16.5%)
Nausea/Vomiting (n=182)		7 (3.8%)
Behavioral (n=184)		12 (6.6%)
Other (n=184)		22 (12.0%)
Recollection of assault		150 (88.2%)
Mean time to presentation in hours (+/- SD)		16.9 (16.6) (range 1-72 hours)
Mean number of perpetrators		1.2 (0.5)

**Table 2**

SART Evaluation by Menarchal Status for Females

	<b>Overall (n=161)</b>	<b>Premenarchal (n=73)</b>	<b>Menarchal (n=88)</b>	<b>p-value</b>
Mean time to ED presentation, hours (+/-SD)	18.1 (17.2)	12.7 (9.9)	22.1 (20.2)	<0.01
Evidence Collected	142 (88.7%)	57 (79.2%)	85 (96.6%)	<0.01
Evidence of Acute Anogenital Injury	32 (19.9%)	6 (8.2%)	26 (29.5%)	<0.01
Urine Gonorrhea/Chlamydia Testing	133 (82.6%)	47 (64.4%)	86 (97.8%)	<0.01
Syphilis Testing	114 (70.8%)	31 (42.5%)	83 (94.3%)	<0.01
HIV Testing	116 (72.0%)	33 (45.2%)	83 (94.3%)	<0.01
Trichomonas vaginalis testing	82 (50.9%)	9 (12.3%)	73 (82.9%)	<0.01
Pregnancy Testing	92 (57.1%)	8 (10.9%)	84 (95.4%)	<0.01
Rectal Gonorrhea/Chlamydia test	16 (9.9%)	5 (6.8%)	11 (12.5%)	0.23
Throat Gonorrhea/Chlamydia test	1 (0.6%)	0	1 (1.1%)	0.36
Urine Drug Screen	30 (18.6%)	3 (4.1%)	27 (30.7%)	<0.01
HIV PEP offered	90 (55.9%)	15 (20.5%)	75 (85.2%)	<0.01
STI Prophylaxis offered	85 (52.8%)	10 (13.7%)	75 (85.2%)	<0.01
Pregnancy Prophylaxis	81 (50.3%)	2 (2.7%)	79 (89.8%)	<0.01

**Table 3**

## SART Evaluation for Males

	Frequency (%) n=23
Mean time to presentation, hours (+/-SD)	8.1 (6.2)
Evidence Collected	22 (95.6%)
Evidence of Acute Anogenital Injury	6 (26.1%)
Urine Gonorrhea/Chlamydia Testing	15 (65.2%)
Syphilis Testing	15 (65.2%)
HIV Testing	17 (73.9%)
Trichomonas vaginalis testing	3 (13.0%)
Rectal Gonorrhea/Chlamydia test	7 (30.4%)
Throat Gonorrhea/Chlamydia test	1 (4.4%)
Urine Drug Screen	1 (4.4%)
HIV PEP offered	12 (52.2%)
STI Prophylaxis offered	9 (39.1%)

**Table 4**

## SART Evaluation by Presence or Absence of Acute Anogenital Injuries

	<b>Overall (n=181)*</b>	<b>Injury (n=38)</b>	<b>No Injury (n=143)</b>	<b>p-value</b>
Mean Time to presentation (+/- SD)	16.9 (16.6)	14.4 (13.8)	17.5 (17.2)	p=0.34
Evidence Collected	163 (90.6%)	63 (91.3%)	100 (90.1%)	p=0.79
Urine Gonorrhea/Chlamydia Testing	145 (80.1%)	36 (94.7%)	109 (76.2%)	p=0.01
Syphilis Testing	128 (70.7%)	33 (86.8%)	96 (66.4%)	p=0.01
HIV Testing	131 (72.4%)	34 (89.4%)	97 (67.8%)	p<0.01
Trichomonas vaginalis testing	85 (46.9%)	26 (52.2%)	59 (41.2%)	p=0.27
Pregnancy Testing <sup>^</sup>	83 (96.5%)	25 (96.1%)	58 (96.7%)	p=0.91
Rectal Gonorrhea/Chlamydia test	23 (12.7%)	6 (15.8%)	17 (11.9%)	p=0.52
Throat Gonorrhea/Chlamydia test	2 (1.1%)	2 (5.7%)	0 (0%)	p<0.01
Urine Drug Screen	31 (17.1%)	7 (18.4%)	24 (16.8%)	p=0.82
HIV PEP offered	101 (55.8%)	30 (78.9%)	71 (49.7%)	p<0.01
STI Prophylaxis offered	93 (51.4%)	29 (76.3%)	64 (44.8%)	p<0.01
Pregnancy Prophylaxis Offered <sup>^</sup>	78 (90.7%)	24 (92.3%)	54 (90.0%)	p=0.74

\* 3 patients refused physical exams

<sup>^</sup> Menarchal females only