

Ovarian Cystadenoma in a Trafficked Patient

Kanani E. Titchen, MD,^a Douglas Katz, MD,^{b,c} Kidian Martinez, MSW,^{b,c} Krishna White, MD, MPH^{b,c}

The topic of child sex trafficking is receiving increased attention both in the lay press and in research articles. Recently, a number of physician organizations have issued policy statements calling for the education and involvement of physicians in combating this form of “modern-day slavery.” Primary care and emergency medicine physicians have led these efforts, but a number of these victims may present to surgeons. Surgeons are in a unique position to identify trafficked patients; during the process of undraping, intubation, and surgical preparation, signs of trafficking such as tattoos, scars, dental injuries, and bruising may be evident. In addition, these patients may have specific needs in terms of anesthesia and postoperative care due to substance abuse. Here, we report the case of an 18-year-old girl with a history of sexual exploitation who presents for cystadenoma excision. To our knowledge, this is the first report of a sex-trafficked pediatric patient presenting for surgery.

Recently, a number of physician organizations have issued policy statements calling for the education and involvement of physicians in combating this form of “modern-day slavery.”^{1–3} Surgeons are in a unique position to identify trafficked patients; during the process of undraping, intubation, and surgical preparation, signs of trafficking such as tattoos, scars, dental injuries, and bruising may be evident.⁴ In addition, these patients may have specific needs in terms of anesthesia and postoperative care due to substance abuse.⁵

CASE REPORT

An 88.6-kg, 18-year-old Latina patient was referred by her pediatrician to an adolescent medicine specialist for severe left abdominal pain recurring over 1.5 years. The patient experienced recurrent debilitating pain for which she had been seen at a local emergency department and by her pediatrician. Physical examination

revealed an obese teenager (BMI, 35.72; 98th percentile) with multiple tattoos, some of which included expletives and nonspecific symbols (Fig 1). Her abdomen was soft, tender to palpation, nondistended, and with a firm mass palpated in the left lower abdominal quadrant.

During this initial adolescent medicine visit, the patient disclosed illegal immigrant status, sexarache at 13 years of age, and an “estimated 150” sexual partners. She had a history of runaway status and homelessness, multiple sexually transmitted diseases (STDs), and heroin abuse after receiving a prescription for Percocet (Endo Pharmaceuticals, Newark, DE) for a tonsillectomy at age 12 years; she also reported multiple heroin overdoses. She had quit heroin “cold turkey” upon regaining consciousness from her last overdose in a motel room. The patient reported a suicide attempt, as well as physical abuse by her father and “being sexually exploited while on drugs, and exchanging

abstract

^aDivision of Adolescent Medicine, Department of Pediatrics, The Children’s Hospital at Montefiore, Bronx, New York; ^bA.I. duPont Hospital for Children, Wilmington, Delaware; and ^cThomas Jefferson University Hospitals, Philadelphia, Pennsylvania

Dr Titchen conceptualized and designed the study, provided continuity of clinical care for the patient, and drafted the initial manuscript; Dr Katz performed the surgical intervention and critically reviewed the manuscript; Ms Martinez provided preoperative and postoperative care coordination for the patient, and critically reviewed the manuscript; and Dr White supervised and coordinated clinical care for the patient, provided preoperative and postoperative care coordination for the patient, and reviewed and revised the manuscript. All authors approved the final manuscript as submitted and agree to be accountable for all aspects of the work.

DOI: 10.1542/peds.2015-2201

Accepted for publication Feb 3, 2016

Address correspondence to Kanani E. Titchen, MD, The Children’s Hospital at Montefiore, Department of Pediatrics, Division of Adolescent Medicine, 3415 Bainbridge Ave, Bronx, NY 10467. E-mail: ktitchen@montefiore.org

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2016 by the American Academy of Pediatrics

FINANCIAL DISCLOSURE: The authors have indicated they have no financial relationships relevant to this article to disclose.

FUNDING: No external funding.

POTENTIAL CONFLICT OF INTEREST: The authors have indicated they have no potential conflicts of interest to disclose.

To cite: Titchen KE, Katz D, Martinez K, et al. Ovarian Cystadenoma in a Trafficked Patient. *Pediatrics*. 2016;137(5):e20152201



FIGURE 1
“Branding” symbol tattooed onto the patient by her trafficker while she was unconscious. According to the patient’s report, multiple girls working for this trafficker had the same tattoo.

sex for money.” Although she had reconciled with her mother and had been seen regularly by health care workers from the time she was 12 years old, she had not disclosed the extent of her sexual or drug history to medical providers before this visit. At 18 years of age, the patient expressed a strong preference for any necessary abdominopelvic surgery to be performed at the local children’s hospital rather than at the neighboring adult hospital. She requested that adolescent medicine providers be involved in her postoperative care, and she voiced fear of postoperative pain management with opioids and of a possible heroin relapse if treated with opioids at the nearby adult hospital. Results of the STD testing at this time revealed infection with *Neisseria gonorrhoea*, *Trichomonas vaginalis*, and bacterial vaginosis, and these infections were treated.

A pelvic ultrasound revealed a 9.0 × 5.3 cm multiloculated cystic left adnexal mass abutting the left ovary. Differential diagnosis included complex adnexal cyst and

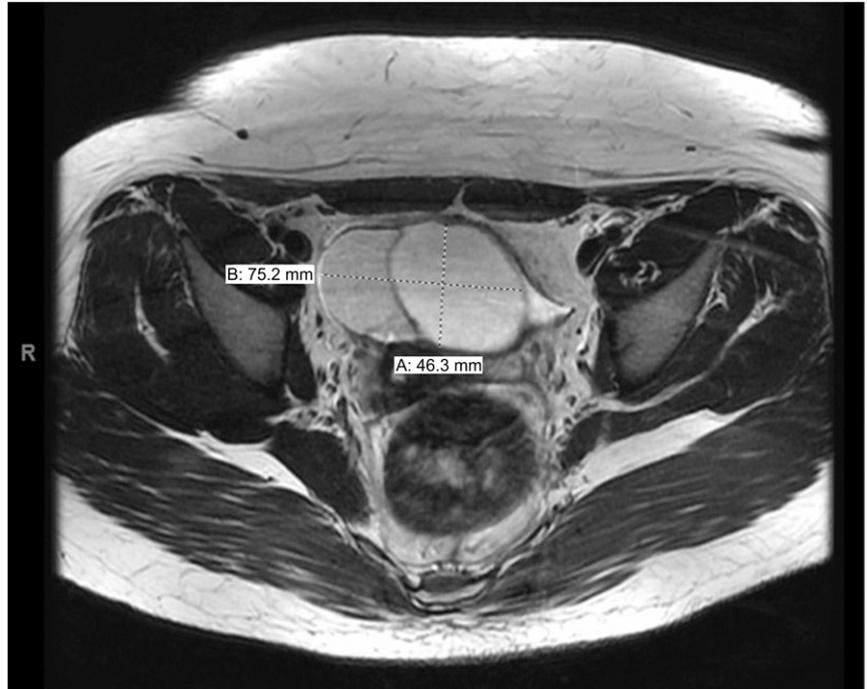


FIGURE 2
MRI showed a multilocular cystic mass measuring 4.6 × 7.5 × 6.4 cm with 2 thin septa.

cystadenoma. An MRI confirmed a multilocular cystic mass abutting the medial margin of the left ovary and with 2 thin septa (Fig 2). Cystic components had different signal intensity characteristics on T1-weighted imaging, likely from differences in hemorrhagic composition. In addition, there was an ill-defined high T2 signal and a central portion of the left ovary with peripheral follicles. Asymmetrically decreased enhancement of the left ovarian parenchyma raised concern for partial/intermittent left ovarian torsion, which was likely responsible for the patient’s recurrent abdominal pain over 1.5 years.

After treatment of the patient’s STDs, and after a brief period during which she was lost to follow-up due to estrangement from her mother and homelessness, the patient was relocated. She returned to the children’s hospital for laparoscopic reduction of torsion of the paraovarian mass with laparoscopic resection.

Immediately upon entering the peritoneal cavity, the surgical team noted a 10- to 12-cm mass originating from the left adnexa with a piece of omentum directly wrapped around the base of it. The surgical team sharply divided this omentum, and the ovary appeared completely viable. It was preserved intact. The mass was removed, and an ON-Q catheter (I-Flow Corporation, Irvine, CA) was placed.

The histologic findings were consistent with a benign serous cystadenoma of the ovary (Fig 3). The level of α -fetoprotein was 1.9 ng/mL (normal range, 0–12 ng/mL). Serum tumor marker CA-125 measured 14 U/mL (<35 U/mL is within normal limits). Results of a serum β -human chorionic gonadotrophin test were negative.

At the postoperative visit follow-up 4 days later, the patient reported that the pain was well controlled with the ON-Q anesthetic delivery system for pain relief with no need for systemic opiates, and she experienced no difficulties voiding, stooling, or

walking. During her hospitalization and postoperative period, the patient was connected to social services and continuing education resources.

DISCUSSION

Although ovarian masses are uncommon in minors, and a majority (80%–90%) are benign, a significant number are associated with ovarian torsion.⁶ Current preferred treatment preserves the ovaries involved in torsion, regardless of ischemic hemorrhage and related color change.⁷ Risks of thromboembolism from ischemic changes and of future malignancy are low.^{7,8} According to a study by Papic et al,⁹ predictors for ovarian malignancy in children include tumor size >10 cm (although some use 7.5 cm and 8 cm as a cutoff), tumor with primarily solid components, and elevated serum tumor markers, such as α -fetoprotein and β -human chorionic gonadotropin.

Patients who are victims of sex trafficking may require coordination of care above and beyond the norm. The US Congress defines human sex trafficking as “the recruitment, harboring, transportation, provision, or obtaining of a person for the purpose of a commercial sex act, in which the commercial sex act is induced by force, fraud, or coercion or in which the person induced to perform such act has not attained 18 years of age.”¹⁰ There are limited accurate data concerning the incidence or prevalence of trafficking,¹¹ but modest estimates suggest that 100 000 to 300 000 minors in the United States are at risk for being trafficked annually.¹² Most US adolescent female subjects are recruited into sex trafficking by age 15 years,^{12–16} as occurred with the study patient. Although anyone can be at risk for human sex trafficking, certain factors increase risk, such as female gender, young age, extreme poverty, lack of education, history

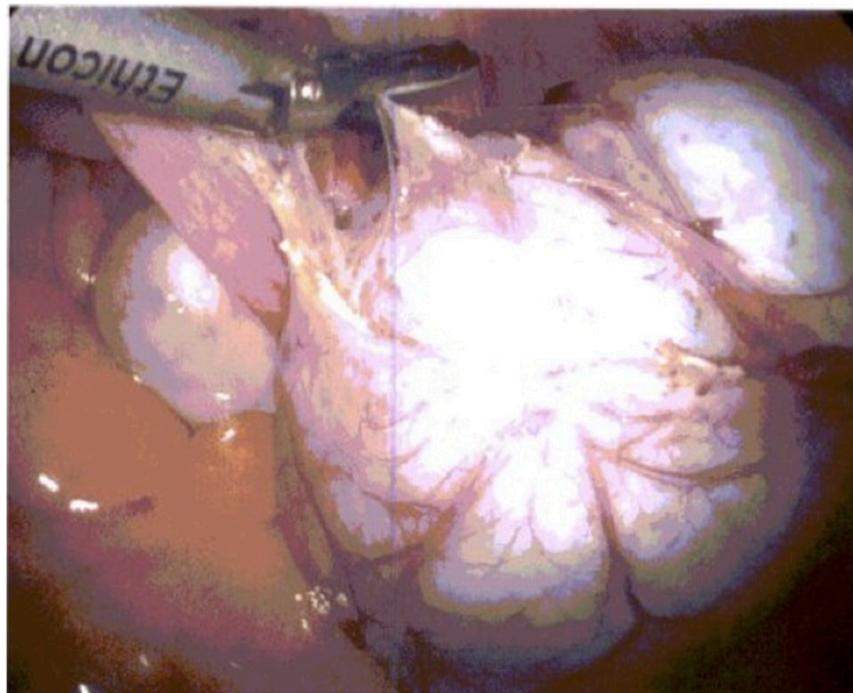


FIGURE 3

Pathology report showed a 67-g, 7.9 × 6.1 × 3.1 cm partially collapsed lobulated cyst consistent with a benign ovarian serous cystadenoma.

of abuse or family instability, and marginalization (eg, racial/ethnic minority, immigrant, sexual minority status).¹⁷ The study patient was female, an immigrant, belonged to a minority group, and admitted to a history of physical abuse as a child. In addition, she was of lower socioeconomic status and had dropped out of middle school.

The study patient was also intermittently homeless, another significant risk factor for human sex trafficking; >10% of US minors living in shelters and 28% of US minors living on the streets report exchanging sex for drugs or money.¹⁸ Important screening questions for minors who are at risk include, “Have you ever run away from home? How many times in the last year?”¹⁹ and “Have you ever exchanged sex for food, shelter, drugs or money?”^{17, 20} Our adolescent medicine health care provider asked the study patient if she had ever traded anything for sex, and it was the patient’s positive response to this question that alerted

providers to the possibility that this patient was a victim of human sex trafficking.

Due to unstable social and living situations, patients who have been victims of human trafficking frequently present late in the disease course and have multiple social and health care needs.²¹ Many present while still being exploited.^{22,23} Frequently, physical signs of trafficking are apparent in the form of malnutrition and/or obesity, tattoos, repeated STDs, pelvic inflammatory disease, repeated pregnancies and/or abortions, bruises, lacerations, or scars.^{4,21,24,25} A systematic review of the literature by Oram et al²⁶ indicated that women forced or deceived into entering sex work before the age of 18 years were at greater risk for physical and sexual violence than those who had entered after the age of 18 years on their own terms, although both groups experienced high levels of violence. Sex-trafficked patients may be hesitant to reveal details

of their abuse for fear of trafficker violence, physician judgment, out of embarrassment, or due to their own failure to recognize their treatment as abusive.²⁷ They frequently experience posttraumatic stress disorder, substance abuse, anxiety, and depression, and these mental health issues may complicate history-taking.²⁵ However, once made to feel safe and respected, patients may reveal to their medical provider past abuse, homelessness, truancy, multiple sexual partners, and drug use.^{4,18}

We used a trauma-informed approach with multidisciplinary case management in caring for this patient. We took into account her previous heroin abuse and tailored the postsurgical pain management plan to avoid systemic opioids due to the patient's fear of relapse. When the patient failed to show for appointments, multiple members of the treatment team encouraged follow-up and accommodated the patient's erratic schedule and communication style.

CONCLUSIONS

This case illustrates common warning signs for sex trafficking in youth who present to the medical setting for routine and/or delayed treatment of acute and chronic disease processes. Recognition of the warning signs of sex trafficking is critical for effective intervention on behalf of these patients and may directly affect postsurgical recovery and outcomes. As an increasing number of medical societies acknowledge the impact of sex trafficking on US minors, resources for screening, identification, and intervention for sex-trafficked patients are growing.^{2,3,17,19,20,28,29}

ABBREVIATION

STD: sexually transmitted disease

REFERENCES

- Institute of Medicine, National Research Council. Confronting commercial sexual exploitation and sex trafficking of minors in the United States: a guide for providers of victim and support services. Available at: www.ncbi.nlm.nih.gov/books/NBK223975/. Accessed August 12, 2015
- Greenbaum J, Crawford-Jakubiak JE; Committee on Child Abuse and Neglect. Child sex trafficking and commercial sexual exploitation: health care needs of victims. *Pediatrics*. 2015;135(3):566–574
- American Medical Women's Association. Harrison SL, Atkinson HG, Newman CB, et al. Position paper on the sex trafficking of women and girls in the United States. Available at: www.amwa-doc.org/wp-content/uploads/2013/12/FULL-AMWA-Position-Paper-on-Human-Sex-Trafficking-May-2014.pdf. Accessed August 12, 2015
- Zimmerman C, Hossain M, Yun K, et al. The health of trafficked women: a survey of women entering posttrafficking services in Europe. *Am J Public Health*. 2008;98(1):55–59
- Department of Health and Human Services. Resources: common health issues seen in victims of human trafficking. Look beneath the surface: restore and rescue. Available at: www.justice.gov/sites/default/files/usao-ndia/legacy/2011/10/14/health_problems.pdf. Accessed August 12, 2015
- Geimanaite L, Trainavicius K. Ovarian torsion in children: management and outcomes. *J Pediatr Surg*. 2013;48(9):1946–1953
- Galinier P, Carfagna L, Delsol M, et al. Ovarian torsion. Management and ovarian prognosis: a report of 45 cases. *J Pediatr Surg*. 2009;44(9):1759–1765
- Aziz D, Davis V, Allen L, Langer JC. Ovarian torsion in children: is oophorectomy necessary? *J Pediatr Surg*. 2004;39(5):750–753
- Papic JC, Finnell SM, Slaven JE, Billmire DF, Rescorla FJ, Leys CM. Predictors of ovarian malignancy in children: overcoming clinical barriers of ovarian preservation. *J Pediatr Surg*. 2014;49(1):144–147, discussion 147–148
- Victims of Trafficking and Violence Protection Act of 2000, Pub L No. 106-386, 114 Stat 1464
- Macy RJ, Graham LM. Identifying domestic and international sex-trafficking victims during human service provision. *Trauma Violence Abuse*. 2012;13(2):59–76
- Richard J, Estes N, Weiner A. *The Commercial Sexual Exploitation of Children in the U.S., Canada and Mexico*. Philadelphia, PA: University of Pennsylvania; 2001:260
- Gibbs D, Walters JLH, Lutnick A, et al. Evaluation of services for domestic minor victims of human trafficking. Available at: <https://www.ncjrs.gov/pdffiles1/nij/grants/248578.pdf>. Accessed October 15, 2015
- Silbert MH, Pines AM. Entrance into prostitution. *Youth Soc*. 1982;13(4):471–500. Available at <https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=84083>
- Kramer LA, Berg EC. A survival analysis of timing of entry into prostitution: the differential impact of race, educational level, and childhood/adolescent risk factors. *Social Inq*. 2003;73(4):511–528[doi: 10.1111/1475-682X.00069]
- Raphael J, Shapiro DL. *Sisters Speak Out: The Lives and Needs of Prostituted Women in Chicago*. Chicago, IL: Center for Impact Research; 2002
- Alpert EJ, Ahn R, Albright E, Purcell G, Burke TF, Macias-Konstantopoulos WL. Human Trafficking: Guidebook on Identification, Assessment, and Response in the Health Care Setting. MGH Human Trafficking Initiative, Division of Global Health and Human Rights, Department of Emergency Medicine, Massachusetts General Hospital, Boston, MA and Committee on Violence Intervention and Prevention, Massachusetts Medical Society, Waltham, MA. Available at: [www.massmed.org/Patient-Care/Health-Topics/Violence-Prevention-and-Intervention/Human-Trafficking-\(pdf\)](http://www.massmed.org/Patient-Care/Health-Topics/Violence-Prevention-and-Intervention/Human-Trafficking-(pdf)). Accessed August 12, 2015
- Greene JM, Ennett ST, Ringwalt CL. Prevalence and correlates of survival sex among runaway and

- homeless youth. *Am J Public Health.* 1999;89(9):1406–1409
19. American Professional Society on the Abuse of Children. Greenbaum J, Kellogg N, Isaac R, et al. The commercial sexual exploitation of children: the medical provider's role in identification, assessment and treatment. Available at: www.kyaap.org/wp-content/uploads/APSAC_Guidelines.pdf. Accessed August 12, 2015
 20. Via Christi Hospital. Via Christi Health: HT assessment. Available at: https://www.viachristi.org/sites/default/files/pdf/about_us/2015-0625%20Human%20trafficking%20assessment_web.pdf. Accessed August 15, 2015
 21. Barrows J, Finger R. Human trafficking and the healthcare professional. *South Med J.* 2008;101(5):521–524
 22. Baldwin SB, Eisenman DP, Sayles JN, Ryan G, Chuang KS. Identification of human trafficking victims in health care settings. *Health Hum Rights.* 2011;13(1):E36–E49
 23. Lederer L, Wetzel CA. The health consequences of sex trafficking and their implications for identifying victims in healthcare facilities. *Ann Health Law.* 2014;23(1):61–91
 24. Muftic LR, Finn MA. Health outcomes among women trafficked for sex in the United States: a closer look. *J Interpers Violence.* 2013;28(9):1859–1885
 25. Macias-Konstantopoulos WL, Munroe D, Purcell G, Tester K, Burke TF, Ahn R. The commercial sexual exploitation and sex trafficking of minors in the Boston metropolitan area: experiences and challenges faced by front-line providers and other stakeholders. *J Appl Res Child.* 2015;6(1):4
 26. Oram S, Stöckl H, Busza J, Howard LM, Zimmerman C. Prevalence and risk of violence and the physical, mental, and sexual health problems associated with human trafficking: systematic review. *PLoS Med.* 2012;9(5):e1001224
 27. Hom KA, Woods SJ. Trauma and its aftermath for commercially sexually exploited women as told by front-line service providers. *Issues Ment Health Nurs.* 2013;34(2):75–81
 28. Baldwin S, Chang K, Chisolm-Straker M, Grace A, Littenberg N, Stoklosa H. Heal trafficking: health professional advocacy, education, & linkage. Available at: <http://healtrafficking.org/linkagesresources>. Accessed May 7, 2015.
 29. American Medical Women's Association. PATH: Physicians Against the Trafficking of Humans. Available at: <http://www.doc-path.org/path>. Accessed May 7, 2016

Ovarian Cystadenoma in a Trafficked Patient

Kanani E. Titchen, Douglas Katz, Kidian Martinez and Krishna White

Pediatrics 2016;137;

DOI: 10.1542/peds.2015-2201 originally published online April 5, 2016;

Updated Information & Services

including high resolution figures, can be found at:
<http://pediatrics.aappublications.org/content/137/5/e20152201>

References

This article cites 17 articles, 1 of which you can access for free at:
<http://pediatrics.aappublications.org/content/137/5/e20152201#BIBL>

Subspecialty Collections

This article, along with others on similar topics, appears in the following collection(s):
Adolescent Health/Medicine
http://www.aappublications.org/cgi/collection/adolescent_health_medicine_sub
Child Abuse and Neglect
http://www.aappublications.org/cgi/collection/child_abuse_neglect_sub

Permissions & Licensing

Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:
<http://www.aappublications.org/site/misc/Permissions.xhtml>

Reprints

Information about ordering reprints can be found online:
<http://www.aappublications.org/site/misc/reprints.xhtml>

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™



PEDIATRICS®

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

Ovarian Cystadenoma in a Trafficked Patient

Kanani E. Titchen, Douglas Katz, Kidian Martinez and Krishna White

Pediatrics 2016;137;

DOI: 10.1542/peds.2015-2201 originally published online April 5, 2016;

The online version of this article, along with updated information and services, is located on the World Wide Web at:

<http://pediatrics.aappublications.org/content/137/5/e20152201>

Pediatrics is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. Pediatrics is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2016 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 1073-0397.

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

