

# Surgical Resection of Bilateral Polycystic Ovaries Causing Ureteral Obstruction

Brenda L. Ma, DO; Alexa A. Engel, MD; Taylor B. Shaw, DO; Dan W. Parrish, MD  
The University of Mississippi Medical Center

## Introduction

The majority of ovarian cysts that develop in children or adolescents are benign, functional in nature and often resolve without treatment. As a result, current guidelines encourage conservative management of ovarian cysts in this population, given the low rate of malignancy. Giant ovarian cysts are defined as cysts larger than 10cm in diameter on imaging or if the size of the cyst exceeds the umbilicus. With these, the likelihood of needing surgical intervention is higher.

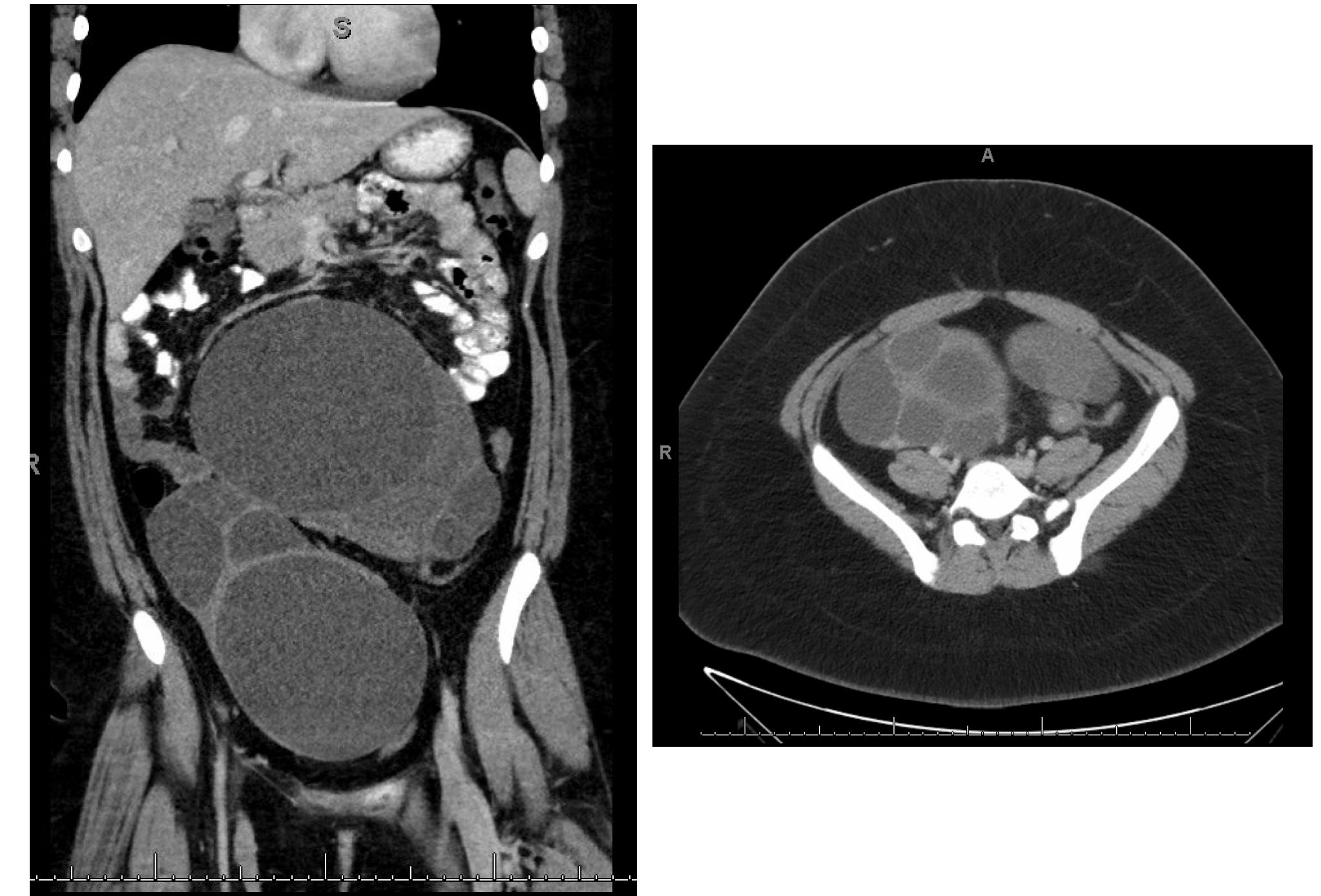
## Methods

We present a case of a 14-year-old female with bilateral giant adnexal cysts causing ureteral obstruction which was successfully treated with surgical resection and preservation of ovarian tissue.

## Results

The patient was a 14-year-old obese female who presented to the emergency room with generalized abdominal pain, nausea and vomiting for two days. Computed tomography (CT) of the abdomen and pelvis demonstrated large bilateral adnexal masses measuring 13.3 x 10.1 x 16.7 centimeters (cm) on the right and 18.1 x 10.5 x 15.8cm on the left, causing bilateral hydronephrosis and bladder compression. Cancer antigen 125 (CA 125) was mildly elevated at 43.9, but remaining tumor markers and laboratory results including uric acid, lactate dehydrogenase, alpha-fetoprotein (AFP), quantitative beta human chorionic gonadotropin (hCG), and inhibin A and B were all within normal limits. Due to symptoms of pain and compressive symptoms, the decision was made to take the patient to the operating room (OR) for exploratory laparotomy with bilateral cystectomies. Intra-operatively, multiple, large bilateral ovarian cysts were seen with simple, clear fluid. These were individually enucleated until only sub centimeter cysts and ovarian tissue remained. Bilateral fallopian tubes and ovaries were examined and found to be healthy. The patient's post-operative course was uncomplicated and abdominal pain had resolved at follow-up appointment. Final pathology returned as bilateral cystadenomas without evidence of malignancy.

## Imaging



## Conclusion

In children or adolescents, it is paramount that all attempts be made to preserve ovarian tissue. We present a case of successful bilateral ovarian cystectomies without oophorectomy resulting in the resolution of abdominal pain and ureteral obstruction. We encourage all gynecologic and pediatric surgery providers to become familiar with fertility-preserving techniques in respect to ovarian cysts requiring intervention.