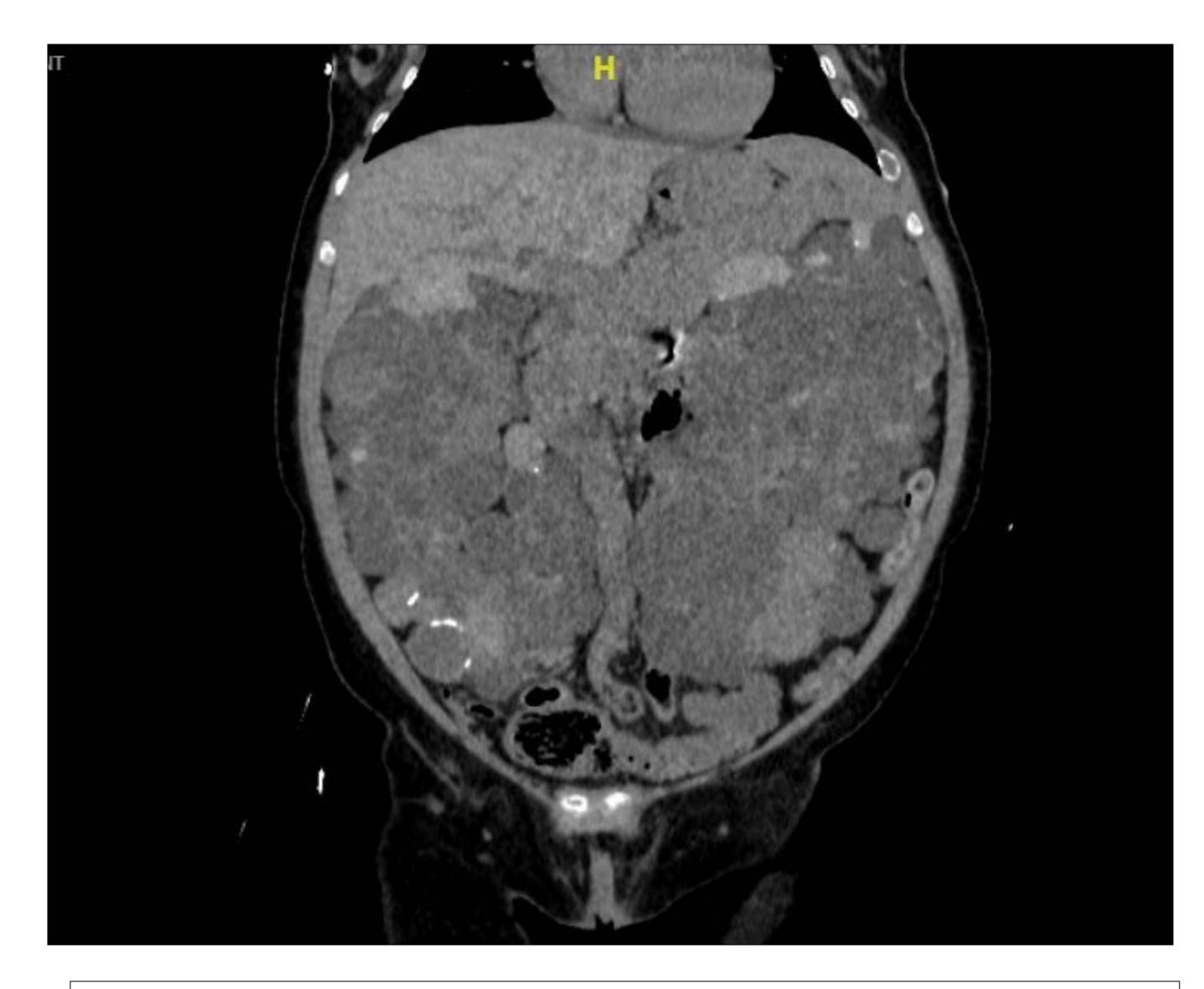
# A case of ADPKD leading to extrinsic compression of the stomach and dysphagia Virginia Vélez Quiñones M.D., Catherine Ostos Perez M.D., Gustavo Avila Amat M.D.

University of Miami /JFK Medical Center Palm Beach Regional GME Consortium, Atlantis, Florida



### Introduction

- > Autosomal dominant polycystic kidney disease (ADPKD) is a common inherited disease with incidence of 1 in a 1000 live births
- > Symptoms usually present after 30 years of age with end-stage renal disease by the fifth decade of life
- > Renal cysts enlarge the kidneys and can also form in the liver, pancreas and spleen
- > Extra renal associations: cerebral berry aneurysms, arterial hypertension, heart valve defects and hernias
- > Complications can develop such as extrinsic compression of internal structures
- > We present a case of massively enlarged polycystic kidneys leading to progressive dysphagia mimicking esophageal dysmotility disorder secondary to extrinsic compression of the stomach



Markedly enlarged polycystic kidneys with mass effect

## Case Description

- > A 43-year old female diagnosed with ADPKD 4 years prior, presented with progressive dysphagia to solids and liquids for 1 month
- ➤CT abdomen and pelvis showed massively large polycystic kidneys occupying most of the abdominal space, polycystic liver and extrinsic compression of the stomach
- > EGD from a recent prior hospitalization showed esophagitis and biopsy confirmed gastritis
- > GI series showed physiologic pattern of swallowing, no strictures or intrinsic obstruction seen in the esophagus, stomach and duodenum
- > The patient was started on a dysphagia diet which partially controlled her symptoms.
- > Urology was consulted for bilateral nephrectomy



Extrinsic compression of the stomach by massive polycystic kidnevs

### Discussion

- This case reports a rare complication of ADPKD and to the best of our knowledge, this is the first case of massive renal cysts presenting as dysphagia in ADPKD
- > Mass effect symptoms described in literature were leg edema, abdominal fullness or pain, emesis, early satiety, heart failure, arrhythmia, intestinal obstruction and IVC compression.
- > Dysphagia due to extrinsic compression should be considered as a complication of this disease
- > Renal cyst size correlates with degree of renal function and mass effect
- >In such cases, unilateral or bilateral nephrectomy should be strongly considered to decrease morbidity and mortality

### References

- > Kim H, Park HC, Ryu H, Kim K, Kim HS, Oh KH, Yu SJ, Chung JW, Cho JY, Kim SH, Cheong HI, Lee K, Park JH, Pei Y, Hwang YH, Ahn C. Clinical Correlates of Mass Effect in Autosomal Dominant Polycystic Kidney Disease. PLoS One. 2015 Dec 7;10(12):e0144526. doi: 10.1371/journal.pone.0144526. PMID: 26641645; PMCID: PMC4671651.
- >Lubennikov AE, Petrovskii NV, Krupinov GE, Shilov EM, Trushkin RN, Kotenko ON, Glybochko PV. Bilateral Nephrectomy in Patients with Autosomal Dominant Polycystic Kidney Disease and End-Stage Chronic Renal Failure. Nephron. 2021;145(2):164-170. doi: 10.1159/000513168. Epub 2021 Feb 5. PMID: 33550285; PMCID: PMC8006584.
- ➤ Kakinoki K, Noda Y, Takaeda M, Kubo M, Mizuhashi K, Miyamoto I, Nishida T, Takemori Y. Intestinal obstruction in autosomal dominant polycystic kidney disease. Intern Med. 2002 Jun;41(6):441-4. doi: 10.2169/internalmedicine.41.441. PMID: 12135175.
- ➤. Elfiky A, El Imad CT, Karam B, Mulrooney SM. Polycystic Liver With Cardiac Compression Leading to Atrial Fibrillation: Case Report and Review of the Literature. Cureus. 2020 May 5;12(5):e7976. doi: 10.7759/cureus.7976. PMID: 32523833; PMCID: PMC7273405.



This research was supported (in whole or in part) by HCA and/or an HCA affiliated entity. The views expressed in this publication represent those of the author(s) and do not necessarily represent the official views of HCA or any of its affiliated entities.

