

A rare complication: Infection in acromegalic renal cysts

Yuki Mori^{1,2} | Yuki Otsuka¹  | Yasuhiro Nakano¹ | Hiroyuki Sakae¹ |
Kou Hasegawa¹ | Fumio Otsuka¹ 

¹Department of General Medicine, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan

²Center for Graduate Medical Education, Okayama University Hospital, Okayama, Japan

Correspondence

Yuki Otsuka, Department of General Medicine, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, 2-5-1 Shikata-cho, Kita-ku, Okayama 700-8558, Japan.
Email: otsuka@s.okayama-u.ac.jp

Abstract

Renal cysts are detected in one third of acromegaly patients, especially in uncontrolled cases. Clinicians should pay attention to unexpected infection of enlarged renal cysts in acromegaly patients.

KEYWORDS

acromegaly, renal cyst, urinary tract infection

1 | CASE DESCRIPTION

A 73-year-old female with acromegaly who had been treated with octreotide after transsphenoidal surgery 40 years before

was referred for fever and malaise. She also had been treated for hypertension, dyslipidemia, osteoporosis, colon polypsis, and diabetes, and all of these were well controlled. She had not developed any renal problems in the past. On

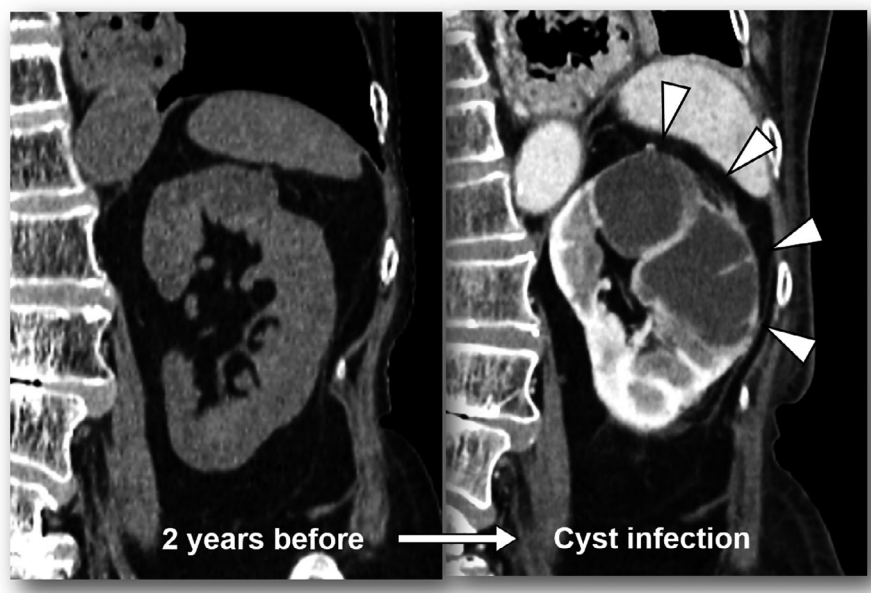


FIGURE 1 Compared to two years before, enhanced CT revealed that left renal cysts were enlarged with perinephric panniculitis (arrowheads), indicating infectious renal cysts

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2020 The Authors. *Clinical Case Reports* published by John Wiley & Sons Ltd.

physical examination, she had costovertebral angle tenderness, and blood tests showed leukocytosis (14 750/ μ L) with a high serum level of C-reactive protein (7.29 mg/dL). Serum growth hormone (GH) and insulin-like growth factor (IGF)-I levels were moderately increased to 3.9 ng/mL and 239 ng/mL, respectively. Enhanced CT revealed enlarged left renal cysts with perinephric panniculitis, indicating infectious cysts (Figure 1). *Klebsiella pneumoniae* was detected from a punctatum of the enlarged cysts, and echography-guided percutaneous drainage with oral levofloxacin was effective.

Acromegaly is often complicated with cystic formation due to excessive GH. Renal cysts are likely to develop in acromegaly, being detected in one third of patients, particularly in elderly patients and patients with a smoking habit who have a high level of GH.¹ Simple cysts are mostly asymptomatic, however, intractable urinary infection can occur in developed cysts.² Attention must be paid to unexpected infection of acromegalic renal cysts in elderly patients as a rare complication of acromegaly.

ACKNOWLEDGMENTS

Published with written consent of the patient.

CONFLICT OF INTEREST

None declared.

AUTHOR CONTRIBUTIONS

YM and YO: wrote the first draft and managed all the submission process. YN, HS, KH, and FO: contributed to the clinical management of the patients and revised the manuscript.

ORCID

Yuki Otsuka  <https://orcid.org/0000-0001-6015-6128>

Fumio Otsuka  <https://orcid.org/0000-0001-7014-9095>

REFERENCES

1. Yamamoto M, Matsumoto R, Fukuoka H, et al. Prevalence of simple renal cysts in acromegaly. *Intern Med*. 2016;55(13):1685-1690.
2. Khan MQ, Ponor IL, Ross AE, Khaliq W. Management of a simple renal cyst in a complex patient. *Case Reports*. 2013;2013:bcr2013009270.

How to cite this article: Mori Y, Otsuka Y, Nakano Y, Sakae H, Hasegawa K, Otsuka F. A rare complication: Infection in acromegalic renal cysts. *Clin Case Rep*. 2020;8:3550–3551. <https://doi.org/10.1002/ccr3.3108>