ARCHIVOS ESPAÑOLES DE UROLOGÍA

Review

Anatomy of Cervical Root Sensation Improved in Disease Management: A Changing Anatomy

Article

Impact of 3D Reconstruction and Printing on Surgical Outcomes in Renal Tumour Surgery

Role of Metabolic Syndrome in Male Fertility: Is It a Risk Factor?

Development and Implementation of the Validity of Young Urologists for the Basic Urethral Skills Competition Through a Think-Pair-and-Share Learning Method

Cardiovascular Hydrochloride for Postoperative Pain Relief and Safety in Children Undergoing Wilms Tumour Operations: A Single-Centre Retrospective Study

Perioperative Blood Diffusion Strategy for Reducing Anxiety in Patients Undergoing Vertebral Bone Surgery

Diagnostic Value of TP-PSA and %P-PSA in BPSP-1 in Bone Metastases-Free Prostate Cancer: Retrospective Comparative Analysis

The Impact of Early Postoperative Pelvic Floor Muscle Exercise on Urinary Incontinence and Complications after Radical Hysterectomy for Cervical Cancer

Efficacy of Acupuncture in Irregular Treatment with Antibacterial for Prostate Surgery in Elderly Men: A Single-Center, Retrospective Study

MRI Pelvic Ganglion Like: 3 Predictors for Growth of Breast Carcinoma by 3D-Breathing Radiophonic Metabolite Areas and Achieving Lipid Ratio

Urogenital Function and Genotypic Outcomes after Nerve-Sparing Radical Cystectomy: A Systematic Review and Meta-Analysis

Effect of Robot-Type Based Pelvic Floor Combined with Sky Muscle Training on Stress Urinary Incontinence in Women

Effect of Laryngeal Anaesthesia versus General Anaesthesia on Elderly Male Patients Undergoing Laparoscopic Radical Prostatectomy: A Retrospective Study

Letter

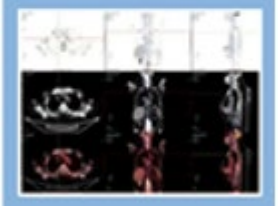
Letter to the Editor Re: Research Progress on Factors Influencing Urinary Retention and Chronic Pain Infection after Colorectal Resection

Letter to the Editor: Re: Nursing Collaborative and Consultative Prevention in Ultrasound-Guided Prostate Biopsy

Volume 78, Issue 1, 2025

Editor-in-Chief: Joaquín Carballido Rodríguez

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Impact Factor 2024: 0.9

Favorite Export

JCR Year 2024

ARCHIVOS ESPANOLES DE UROLOGIA

ISSN
0004-0614

EISSN
1576-8260

JCR ABBREVIATION
ARCH ESP UROL

ISO ABBREVIATION
Arch. Esp. Urol.

Journal information

EDITION
Science Citation Index Expanded (SCIE)

CATEGORY
UROLOGY & NEPHROLOGY

LANGUAGES
Multi-Language

REGION
SPAIN

1ST ELECTRONIC JCR YEAR
2014

Publisher information

PUBLISHER
INIESTARES, S.A.

ADDRESS
SAN GREGORIO, 8, 3 PTA. 4, MADRID 0000, SPAIN

PUBLICATION FREQUENCY
10 issues/year

Journal's performance

Journal Impact Factor

The Journal Impact Factor (JIF) is a journal-level metric calculated from data indexed in the Web of Science Core Collection. It should be used with careful attention to the many factors that influence citation rates, such as the volume of publication and citations characteristics of the subject area and type of journal. The Journal Impact Factor can complement expert opinion and informed peer review. In the case of academic evaluation for tenure, it is inappropriate to use a journal-level metric as a proxy measure for individual researchers, institutions, or articles. Learn more

2024 JOURNAL IMPACT FACTOR
0.9
View calculation

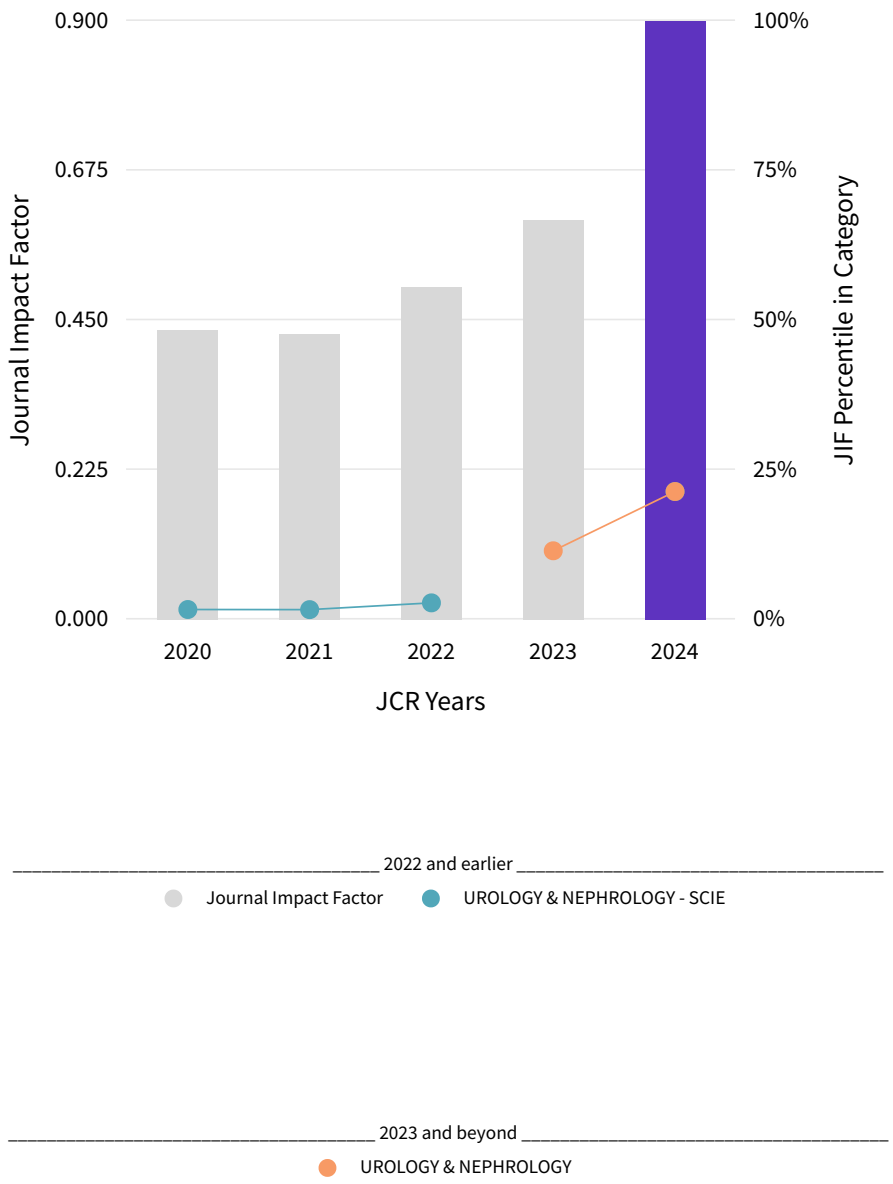
JOURNAL IMPACT FACTOR WITHOUT SELF CITATIONS
0.9
View calculation

Journal Impact Factor Trend 2024 Export

Journal Impact Factor contributing items Export

Citable items (215) | Citing Sources (135)

TITLE	CITATION COUNT
The Clinicopathological and Prognostic Value of NLR, PLR and MLR in Non-…	8
Metastasis of Uveal Melanoma in Bladder: Presentation of Two Cases and Review …	7



Fibronectin-1: A Predictive Immunotherapy Response Biomarker f…	6
Berberine Affects the Proliferation, Migration, Invasion, Cell Cycle, and…	5
Applications of Platelet Rich Plasma in Urology	4
Effect of Flexible Ureteroscopic Lithotripsy on Surgical Outcomes, Rena…	4
Post-Finasteride Syndrome. Literature Review	4
SARS-CoV-2 Vaccine Effects on Semen Parameters: A Systematic Review and…	4
The CAPRA-S Score and Immune Dysfunction as a Guide to Outcome in…	4
Clinical Characteristics and Risk Factors of Systemic Inflammatory Response…	3

View All in Web of Science

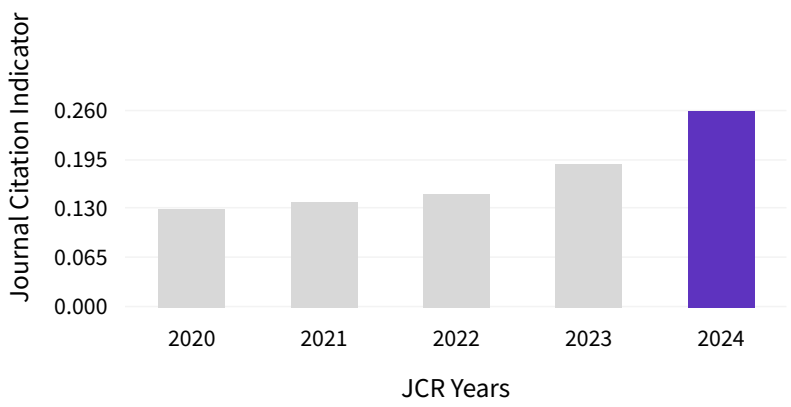
View all years

Journal Citation Indicator (JCI)

Export

0.26

The Journal Citation Indicator (JCI) is the average Category Normalized Citation Impact (CNCI) of citable items (articles & reviews) published by a journal over a recent three year period. The average JCI in a category is 1. Journals with a JCI of 1.5 have 50% more citation impact than the average in that category. It may be used alongside other metrics to help you evaluate journals. Learn more



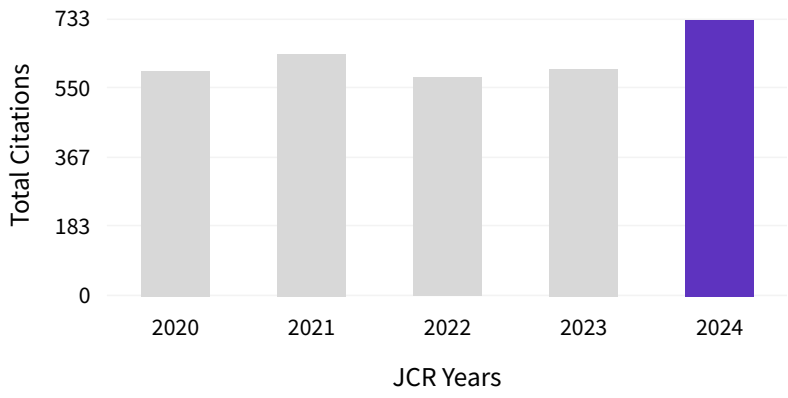
View all years

Total Citations

Export

733

The total number of times that a journal has been cited by all journals included in the database in the JCR year. Citations to journals listed in JCR are compiled annually from the JCR years combined database, regardless of which JCR edition lists the journal.



View all years

15

Citation distribution

Export

The Citation Distribution shows the frequency with which items published in the year or two years prior were cited in the JCR data year (i.e., the component of the calculation of the JIF). The graph has similar functionality as the JIF Trend graph, including hover-over data descriptions for each data point, and an interactive legend where each data element's legend can be used as a toggle. You can view Articles, Reviews, or Non-Citable (other) items to the JIF numerator. Learn more

ARTICLE CITATION MEDIAN

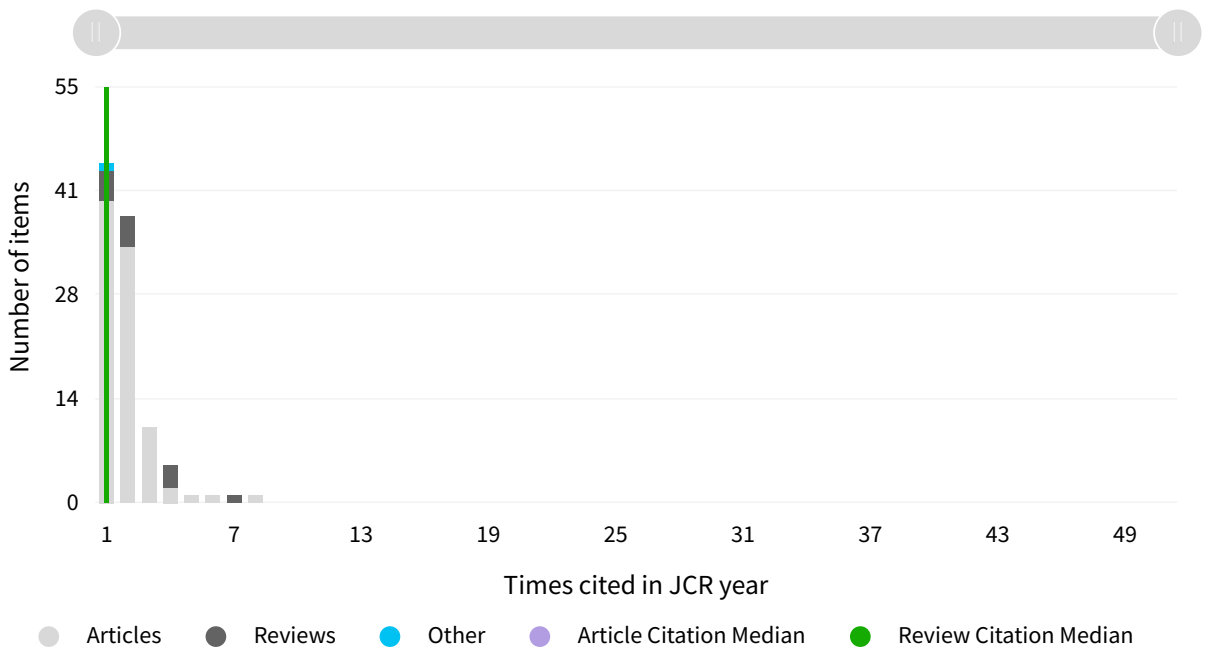
0

REVIEW CITATION MEDIAN

0.5

UNLINKED CITATIONS

1



TIMES CITED

0

ARTICLES

102

REVIEWS

12

OTHER

9

Open Access (OA)

Export

The data included in this tile summarizes the items published in the journal in the JCR data year and in the previous two years. This three-year set of published items is used to provide descriptive analysis of the content and community of the journal. Learn more

Items

TOTAL CITABLE	% OF CITABLE OA
368	0.27%

Citations*

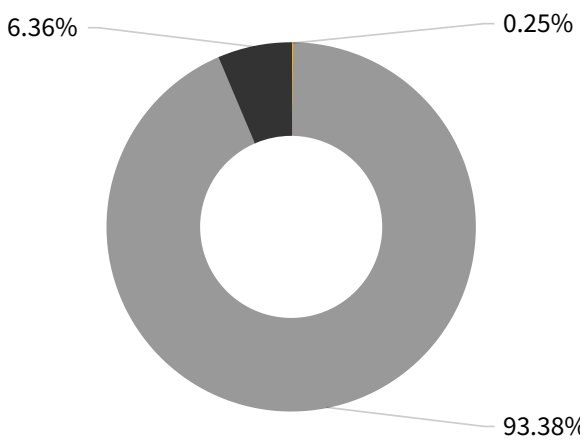
TOTAL CITABLE	% OF CITABLE OA
232	0.00%

15

CITABLE

GOLD OPEN ACCESS
1 / 0.25%

SUBSCRIPTION AND FREE TO READ
367 / 93.38%



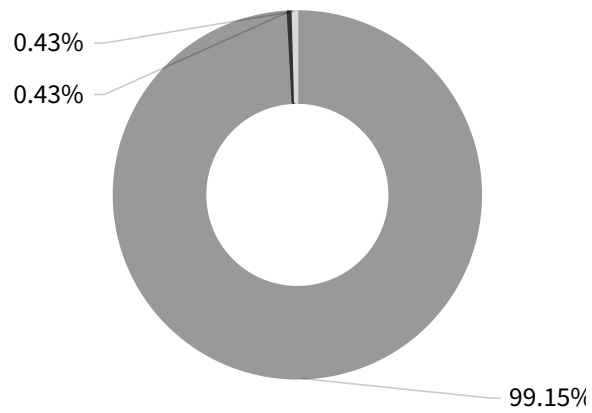
NON-CITABLE

OTHER (NON CITABLE ITEMS)
25 / 6.36%

CITABLE

GOLD OPEN ACCESS
0 / 0.00%

SUBSCRIPTION AND FREE TO READ
232 / 99.15%



NON-CITABLE

OTHER (NON CITABLE ITEMS)
1 / 0.43%

UNLINKED CITATIONS
1 / 0.43%

*Citations in 2024 to items published in [2022 - 2024]

Rank by Journal Impact Factor

Journals within a category are sorted in descending order by Journal Impact Factor (JIF) resulting in the Category Ranking below. A separate rank is shown for each category in which the journal is listed in JCR. Beginning in 2023, ranks are calculated by category.
Learn more

CATEGORY
UROLOGY & NEPHROLOGY

105/133

JCR YEAR	JIF RANK	JIF QUARTILE	JIF PERCENTILE
2024	105/133	Q4	21.4
2023	112/126	Q4	11.5

Rank by JIF before 2023 for UROLOGY & NEPHROLOGY

EDITION
Science Citation Index Expanded (SCIE)

JCR YEAR	JIF RANK	JIF QUARTILE	JIF PERCENTILE
2022	86/88	Q4	2.8
2021	89/90	Q4	1.67
2020	88/89	Q4	1.69
2019	84/85	Q4	1.76

Rank by Journal Citation Indicator (JCI)

15

Journals within a category are sorted in descending order by Journal Citation Indicator (JCI) resulting in the Category Ranking below. A separate rank is shown for each category in which the journal is listed in JCR. Data for the most recent year is presented at the top of the list, with other years shown in reverse chronological order. Learn more

CATEGORY

UROLOGY & NEPHROLOGY

111/133

JCR YEAR	JCI RANK	JCI QUARTILE	JCI PERCENTILE
2024	111/133	Q4	16.92
2023	110/126	Q4	13.10
2022	114/125	Q4	9.20
2021	111/122	Q4	9.43
2020	107/119	Q4	10.50
2019	107/118	Q4	9.75
2018	103/115	Q4	10.87

Citation network

Cited Half-life

5.2 years

The Cited Half-Life is the median age of the items in this journal that were cited in the JCR year. Half of a journal's cited items were published more recently than the cited half-life.

TOTAL NUMBER OF CITES

733

NON SELF-CITATIONS

720

SELF-CITATIONS

13

Citing Half-life

4.1 years

The Citing Half-Life is the median age of items in other publications cited by this journal in the JCR year.

TOTAL NUMBER OF CITES

4,394

NON SELF-CITATIONS

4,381

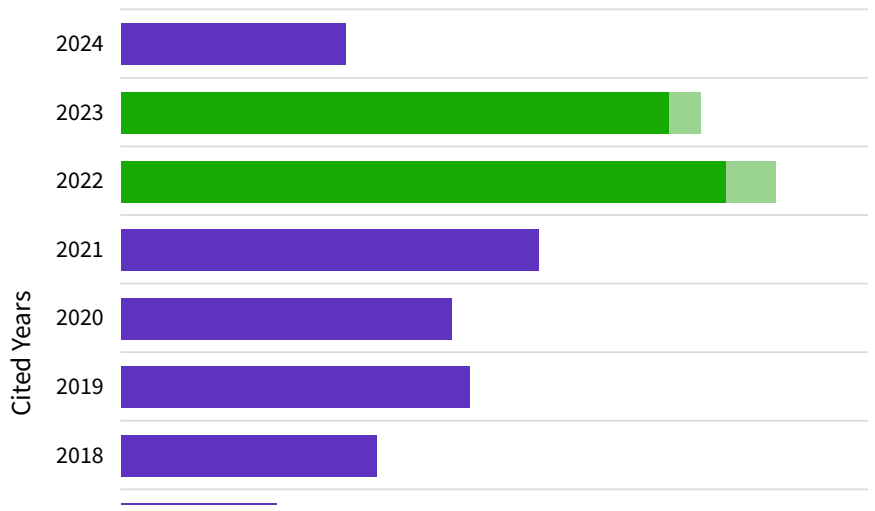
SELF-CITATIONS

13

Cited Half-life Data | Citing Half-life Data

Export

15

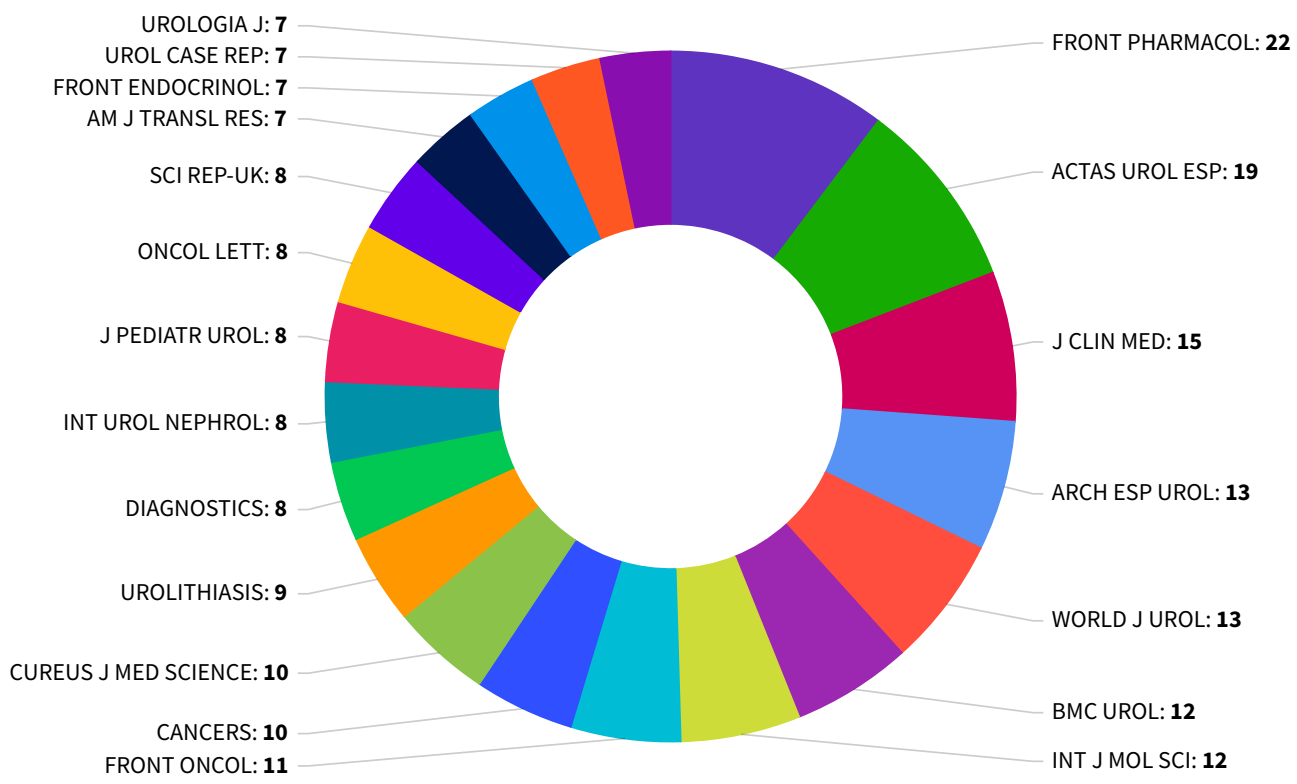


CITED YEAR	# OF CITES FROM 2024	CUMULATIVE %	# OF CITING SOURCES
All years	**733 citations**	**100.00%**	**356 sources**
2024	36 citations	4.91%	22 sources
2023	93 citations	17.60%	69 sources
2022	105 citations	31.92%	82 sources
2021	67 citations	41.06%	52 sources
2020	53 citations	48.29%	43 sources
2019	56 citations	55.93%	46 sources
2018	41 citations	61.53%	34 sources

Journal Citation Relationships

Cited Data | Citing Data

Top 20 journals citing ARCH ESP UROL by number of citations



Content metrics

Source data

This tile shows the breakdown of document types published by the journal. Citable Items are Articles and Reviews. For the purposes of calculating JIF, a JCR year considers the publications of that journal in the two prior years. Learn more

Average JIF Percentile

Export

The Average Journal Impact Factor Percentile takes the sum of the JIF Percentile rank for each category under consideration then calculates the average of those values. Learn more

15

153 total citable items

	ARTICLES	REVIEWS	COMBINED(C)	OTHER DOCUMENT TYPES(O)	PERCENTAG
NUMBER IN JCR YEAR 2024 (A)	144	9	153	15	91%
NUMBER OF REFERENCES (B)	3,803	483	4,286	108	98%
RATIO (B/A)	26.4	53.7	28.0	7.2	

ALL CATEGORIES AVERAGE
21.4

UROLOGY & NEPHROLOGY
21.4

Contributions by organizations

Export

Organizations that have contributed the most papers to the journal in the most recent three-year period. Learn more

RANK	ORGANIZATION	COUNT
1	QINGDAO UNIVERSITY	22
2	SHANDONG FIRST MEDICAL UNIVERSITY & SHANDONG ACADEMY OF MEDICAL SCIENCES	12
3	QINGDAO MUNICIPAL HOSPITAL	10
4	JINAN ZHANGQIU DIST PEOPLES HOSP	9
5	UNIVERSITY OF HEALTH & REHABILITATION SCIENCES	8
-	WENZHOU MEDICAL UNIVERSITY	8

Contributions by country/region

Export

Countries or Regions that have contributed the most papers to the journal in the most recent three-year period. Learn more

RANK	COUNTRY / REGION	COUNT
1	CHINA MAINLAND	226
2	SPAIN	97
3	TURKIYE	34
4	ARGENTINA	9
-	ITALY	9
6	ENGLAND	4
7	GREECE	3
-	MEXICO	3
-	NETHERLANDS	3

Additional metrics

Eigenfactor Score

0.00063

The Eigenfactor Score is a reflection of the density of the network of citations around the journal using 5 years of cited content as cited by the Current Year. It considers both the number of citations and the source of those citations, so that highly cited sources will influence the network more than

Normalized Eigenfactor

0.14188

The Normalized Eigenfactor Score is the Eigenfactor score normalized, by rescaling the total number of journals in the JCR each year, so that the average journal has a score of 1. Journals can then be compared and influence measured by their score relative to 1. Learn more

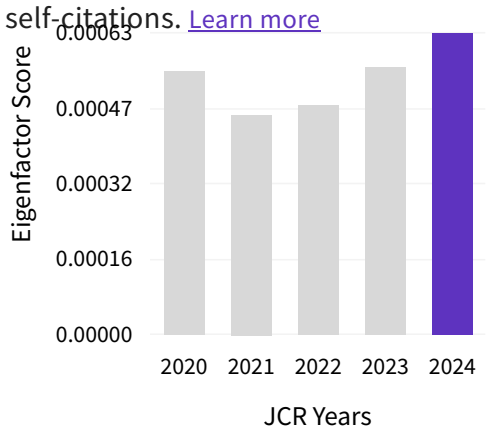
Article influence score

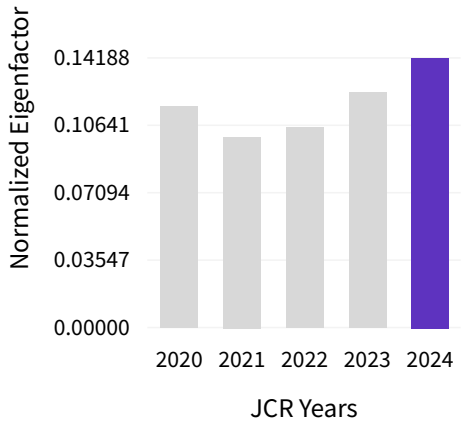
0.136

The Article Influence Score normalizes the Eigenfactor Score according to the cumulative size of the cited journal across the prior five years. The mean Article Influence Score for each article is 1.00. A score greater than 1.00

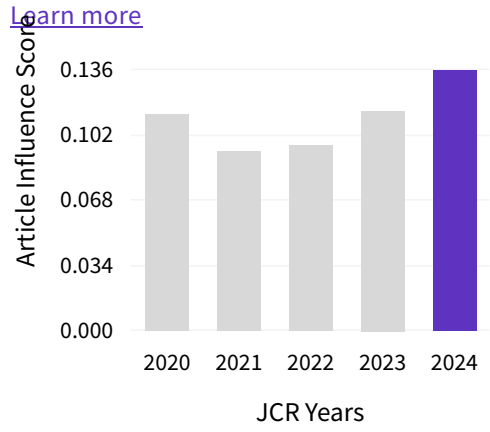
15

less cited sources. The Eigenfactor calculation does not include journal self-citations. Learn more





indicates that each article in the journal has above-average influence. Learn more

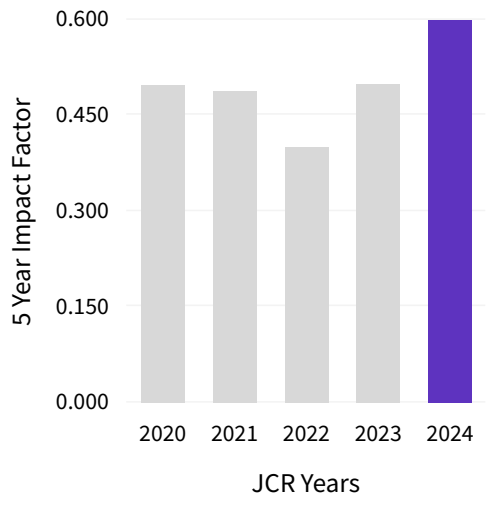


5 Year Impact Factor

0.6

View Calculation

The 5-year Impact Factor is the average number of times articles from the journal published in the past five years have been cited in the JCR year. It is calculated by dividing the number of citations in the JCR year by the total number of articles published in the five previous years. Learn more

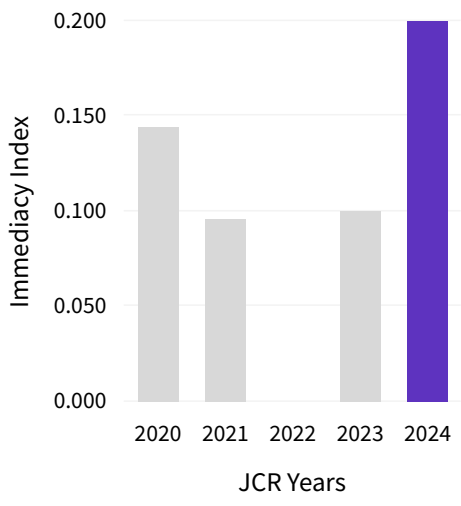


Immediacy Index

0.2

View Calculation

The Immediacy Index is the count of citations in the current year to the journal that reference content in this same year. Journals that have a consistently high Immediacy Index attract citations rapidly. Learn more



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Title / Author /Keywords

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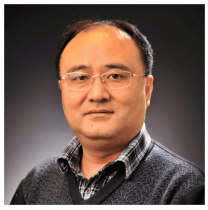
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Case Report

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Intrarenal Ectopic Adrenal Tissue Mimics Renal Cell Carcinoma in the Kidney: A Clinicopathological Diagnostic Challenge

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Background: Adrenal tissue can be found in different organs or systems of the body owing to developmental abnormalities. They may be functional or non-functional and are often discovered incidentally during imaging studies for other conditions. When located within or near the kidney, ectopic adrenal tissue can mimic renal cell carcinoma (RCC), posing a diagnostic challenge for clinicians.

Methods: We reported the case of a 65-year-old male who presented with an asymptomatic renal mass mimicking RCC on preoperative imaging. Owing to the radiological suspicion of malignancy, laparoscopic partial nephrectomy was performed to ensure appropriate management.

Results: The pathological examination of partial nephrectomy material showed findings compatible with adrenal tissue, and a diagnosis of ectopic intrarenal adrenal tissue was made. Immunohistochemical analysis confirmed the adrenal origin, with markers such as Melan-A and alpha-inhibin differentiating the lesion from RCC.

Conclusions: The ectopic location of adrenal tissue, which is usually asymptomatic and benign, complicates diagnostic and therapeutic approaches. In cases with ambiguous imaging findings, intraoperative frozen biopsy may be considered, but surgery is often preferred when malignancy cannot be ruled out. This case highlights the importance of considering ectopic adrenal tissue in the differential diagnosis of renal masses, particularly when imaging findings are inconclusive. Therefore, multidisciplinary collaboration is essential to avoid unnecessary surgical interventions and ensure optimal patient care.

Keywords: ectopic adrenal tissue; adrenorenal fusion; adrenal incidentaloma; intrarenal ectopic adrenal tissue; case report

Background

Adrenal tissue can be located in places other than where it should be owing to abnormalities in embryological development. These tissues have no hormonal function and are usually discovered incidentally. A diagnosis using pre-operative imaging is very difficult to make. In this case report, we aimed to present a case in which ectopic adrenal tissue was found following partial nephrectomy with prediagnosed renal cell carcinoma (RCC).

Case Presentation

A 65-year-old man was admitted to the urology clinic with a one-month history of persistent flank pain, without any accompanying symptoms such as haematuria or fever. His only known medical condition was hypertension. He was a non-smoker and had no previous surgical history. Ultrasound of the urinary tract showed an exophytic hypoechoic lesion 26 mm in diameter with an exophytic extension in the middle pole of the right kidney. A contrast-enhanced whole-abdomen computed tomography (CT) (Fig. 1) scan was performed. CT showed a 30 × 25 mm^2 hypodense lesion with exophytic extension from the cortical area to the perirenal area in the middle pole of the right kidney with a mean density of 26 HU in the non-contrast series. No significant contrast enhancement existed in the arterial-portal phase, with relatively smooth contours and a slightly heterogeneous internal structure. Dynamic contrast-enhanced magnetic resonance imaging (MRI) was then performed and reported as "a lobulated, contoured, heterogeneous dense mass (RCC?) approximately three cm in diameter in the central region of the right kidney" (Fig. 1).

The patient was subjected to laparoscopic partial nephrectomy in the right lateral decubitus position. The renal artery and vein were clamped, and warm ischaemia time was recorded as 20 min. The mass was excised with a macroscopic margin of approximately 5 mm from the surrounding normal renal tissue, and the procedure was completed without complications. The patient was discharged

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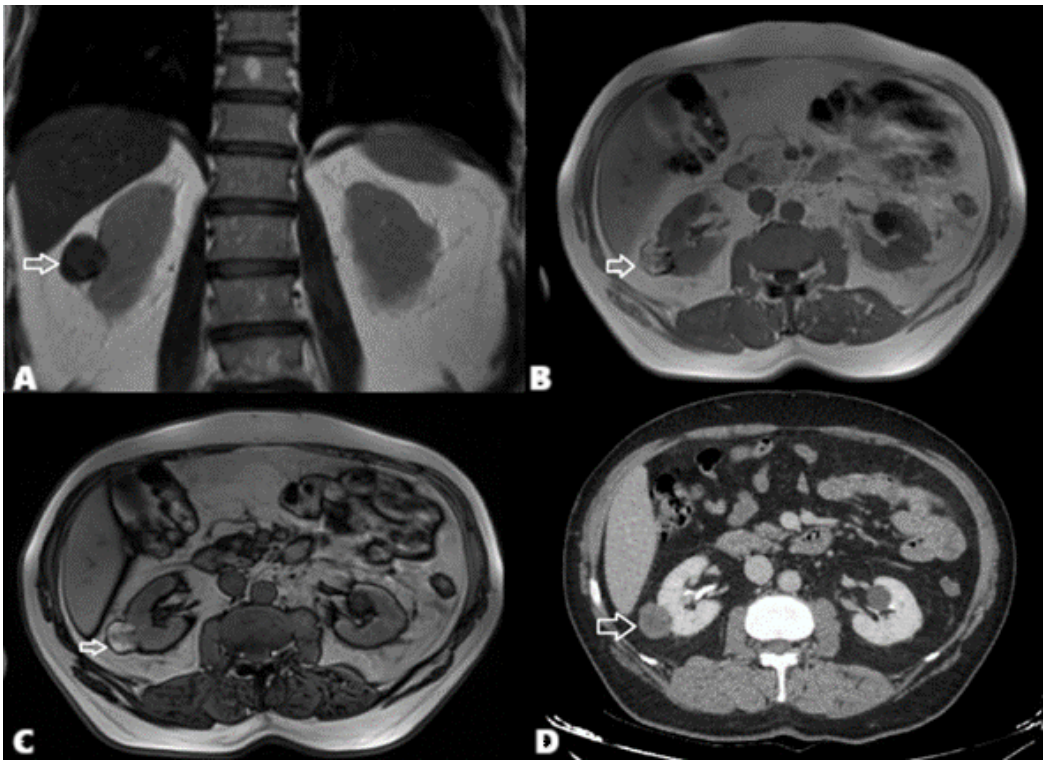


Fig. 1. Preoperative images of the mass. (A–C) Preoperative magnetic resonance image of the mass. (D) Preoperative computed tomography (CT) image of mass.

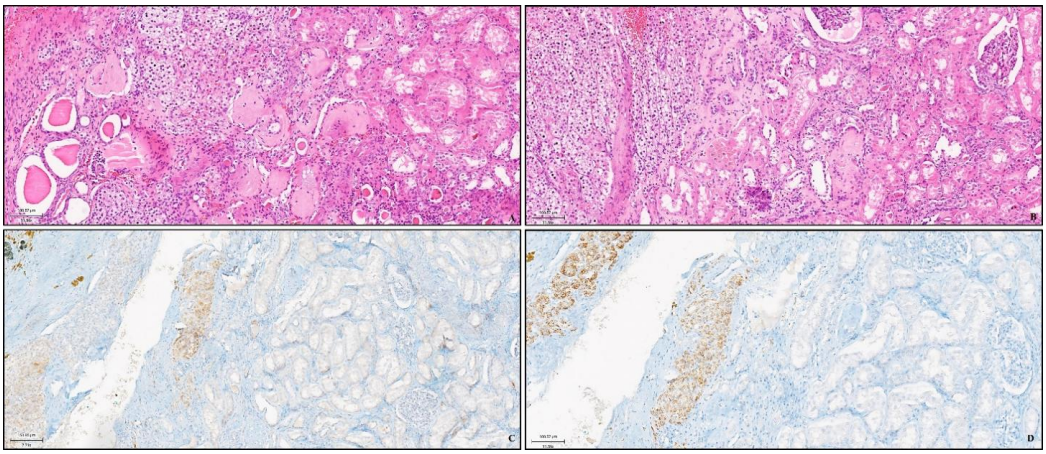


Fig. 2. Immunohistochemical images. (A) Adrenal tissue in direct contact with renal cortex with no intervening fibrous capsule (H&E ×11.56). (B) Irregular solid nests of clear cells in renal parenchyma (H&E ×11.56). (C) The clear cells were markedly and diffusely positive for alpha-inhibin (×7.71). (D) Their cytoplasm showed positive staining for Melan-A (×11.56).

on the third postoperative day. Postoperatively, the patient remained asymptomatic, and follow-up imaging was performed at six months, revealing no signs of recurrence. Given the benign and non-functional nature of the ectopic adrenal tissue, long-term follow-up was deemed unnecessary.

Histopathological and immunohistochemical analyses. The sections from formalin fixed and paraffin-embedded tissues in 2.5 μm thickness were stained with hematoxylin and eosin (H&E). Microscopically, we observed cells with clear cytoplasm and distinct membranes, typically having compact nests, invading the parenchyma in the renal cortex (Fig. 2A,B). These cells were also present in the renal cyst wall with extensive calcification, hyalinisation, and lymphocytic-cell infiltration. These clear cells were thought to belong to either an RCC with cystic degeneration or an adrenal tissue. Immunohistochemical staining was performed for differential diagnosis. The cytoplasm of these cells was markedly and diffusely positive for Melan-A, alpha-inhibin (Fig. 2C,D), synaptophysin, and CD56 but

negative for S100 and chromogranin A. A negative reaction was detected with PAX8, carbonic anhydrase-9, and CD10 in favour of RCC. With these findings, the case was reported as intrarenal ectopic adrenal tissue.

Discussion

It has been documented that adrenal tissues may be found in locations other than their usual sites, and that they may even fuse with other organs [1–4]. In fact, ectopic adrenal tissue is not very rare, occurring in about half of newborns, and ectopic tissue atrophies significantly over the years. However, the presence of ectopic adrenal tissue in older people is thought to be rare, highlighting its clinical significance when encountered. Adrenal fusion was first described by Rokitansky in 1855 as a condition caused by post-inflammatory fibrosis.

Ectopic adrenal glands were first described by Chiari in 1884. In the following years, studies were published showing ectopic adrenal tissue in various parts of the body. Ectopic adrenal tissue is typically located around the adrenal glands or within the genitourinary system, such as the kidney and along the spermatic cord [1–4]. However, it has also been reported in more unusual locations, such as the liver, spinal cord, and stomach [5–8].

Knowledge of the embryology of the adrenal glands can provide insight into the location of ectopic adrenal tissue. The adrenal gland comprises the cortex and medulla, which develop in two distinct embryological pathways. The adrenal cortex is derived from the mesoderm of the urogenital ridge and the adrenal medulla from ectodermal cells [9]. The most primitive form of the adrenal gland, the adrenogonadal primordium (AGP), appears on days 28–30 of gestation [10]. Ectodermal neural chromaffin cells migrate from the sympathetic ganglion at 7 weeks of gestation. The adrenal cortex capsule forms at 9 weeks of gestation [11]. Intrarenal fused adrenal tissue can be observed according to the time of capsule formation. Ectopic adrenal tissue occurs when part of the AGP detaches during development. The content of ectopic adrenal tissue may vary depending on whether detachment occurs before or after neural-crest cell migration.

The hyperplasia of ectopic adrenal tissue can lead to adrenocortical adenoma or adrenocortical carcinoma [12]. The long-term prognosis for patients with ectopic adrenal tissue is typically favourable, with the majority of cases being benign and asymptomatic. Nevertheless, isolated instances of hormonal activity or hyperplasia exist, and they may result in the formation of adenomas or even adrenocortical carcinoma [12]. Therefore, monitoring is recommended for patients with evidence of hormonal activity or suspicious imaging findings to rule out the possibility of malignant transformation. Routine follow-up is not always required in such cases. In this case, clinical (abdominal pain, virilisation, weight loss, etc.) and pathological findings of adrenocortical carcinoma were absent. In literature, cases of ectopic adrenal tissue have been reported as incidental, presenting with hypertension [13], with various symptoms related to hormone production [14], or found in autopsy series [15]. However, this case had no obvious clinical presentation. The mass was found incidentally.

In the present case, hypertension was the only comorbidity. Corticosteroid and catecholamine levels were not measured preoperatively because ectopic adrenal tissue was not included in the preliminary diagnosis given the preoperative imaging results and the patient's clinical presentation. Serum sodium and potassium levels were within normal range.

In fact, adrenal adenomas appear low-intensity on non-contrast CT owing to their high fat content. Such lesions show rapid contrast enhancement and washout on dynamic studies. However, these features are also seen in RCC, so diagnosing ectopic adrenal adenoma preoperatively is difficult. Given the diagnostic challenges and imaging findings, which suggested RCC, the decision to proceed with partial nephrectomy was made. Frozen sections may have been considered, but in cases where RCC is suspected, nephrectomy is often preferred over biopsy because it allows treatment and definitive diagnosis.

Although non-functional ectopic adrenal tissue has no clinical significance, it is likely to be diagnosed later and more difficultly than functional adrenal tissue. Existing literature highlights the diagnostic challenges associated with ectopic adrenal tissue, particularly when located in the renal hilum or sinus, because these lesions can mimic RCC radiologically [1,5]. The management of ectopic adrenal tissue largely depends on clinical and radiological findings. In asymptomatic and non-functional cases such as ours, conservative management is often sufficient. Some studies emphasise the importance of histopathological examination in confirming the benign nature of such tumours because relying solely on imaging may lead to overtreatment [7,16]. When malignancy cannot be ruled out preoperatively, partial nephrectomy is a justified approach to ensure patient safety. In patients with suspicious hormonal parameters, comorbidities, and unusual findings on preoperative imaging, biopsy may be considered prior to radical surgery. In conclusion, close communication among radiology, pathology, and urology teams is important in very rare cases such as this one.

Availability of Data and Materials

The datasets used and/or analysed during the current study were available from the corresponding author on reasonable request.

Author Contributions

ET and ÖK—designed the study; KT, EMA and BYB—collected and analyzed the data. All authors con-

ducted the study, participated in drafting the manuscript, and contributed to critical revision of the manuscript for important intellectual content. All authors gave final approval of the version to be published. All authors participated fully in the work, took public responsibility for appropriate portions of the content, and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or completeness of any part of the work were appropriately investigated and resolved.

Ethics Approval and Consent to Participate

This study was exempted from ethical review by the Ethics Committee of Kocaeli University Hospital. However, it was conducted in accordance with the principles of the Declaration of Helsinki. Informed consent was obtained from the patient for the use of information and images included in the case report, and strict confidentiality was maintained.

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Conflict of Interest

The authors declare no conflict of interest.

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