

Case Report on Renal Cell Carcinoma (Hypernephroma)

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ABSTRACT:

INTRODUCTION : Hypernephroma, renal adenocarcinoma, and renal or kidney cancer are all terms used to describe renal cell carcinoma . It's the most frequent type of adult kidney cancer. The kidneys are organs in our body that help you eliminate waste and maintain a healthy fluid balance. Tubules are small tubes that go through the kidneys. **Patient history:** A 35 year female was admitted AVBRH hospital on a date 12/6/2021 with chief complete abdominal pain, fever Urine with blood (hematuria) On one side, you have low back ache A bump on the side or in the lower back. Patients pain in abdominal it last 3 to 4 months. **Clinical finding:** The patient had undergone with various investigations like blood tests, urine test , Physical examination sonography etc. Medical **Management:** Patient was treated calcium antibiotics are given to treat infection pain management **Nursing management:** Administered fluid replacement i.e. DNS and RL, ,NS, maintain input and output chart maintain vital sign and record. **Conclusion**: Renal cell carcinoma can only be treated by surgical excision.. The optimum means of cure for patients with localised disease appears to be early closure of the renal artery and vein, followed by radical nephrectomy with regional lymphadenectomy. Surgical extirpation should be tried even when the tumour affects the vena cava, surrounding organs, or a single kidney, as the results of more extensive surgery have been favourable. Radiotherapy has not been found to be beneficial as a postoperative adjuvant, and when used before surgery, it may reduce local recurrence but does not appear to increase five-year survival

Keywords: Hypernephroma, Renal Adenocarcinoma, RCC

Introduction:

Hypernephroma and renal adenocarcinoma are type of renal cancer. Renal or kidney cancer are all terms that describe renal cell carcinoma (RCC). In adults, kidney cancer is the most frequent sort of cancer in the body ¹. The kidneys are organs in our bodies that assist us eliminate waste and maintain fluid equilibrium. Tubules are small tubes found in the kidneys². These help in blood filtering, waste excretion, and urine production

when cancer cells in the lining of the tubules of the kidney begin to grow uncontrolled, RCC develops. RCC is a malignancy that spreads quickly and frequently to the lungs and other organs^{3.}

Hypernephroma, renal adenocarcinoma, and renal or kidney cancer are all terms used to describe renal cell carcinoma In adults, it's the most frequent type of kidney cancer.,. Renal cell carcinoma is a kind of kidney cancer that develops in the proximal convoluted tubule's lining, a small hole in the kidney that transports

primary urine⁴. RCC is the most frequent kind of kidney cancer in adults, accounting for 90to95 percent of all cases. percent of cases Men are 1.5 times more likely than women to get renal cell carcinoma RCC is more common among people in their sixth to seventh decades of life.⁵

Patient information: A 35 year female was admitted AVBRH hospital on a date 12/6/2021 with chief complete abdominal pain, fever Urine with blood (hematuria) On one side, you have low back ache. A bump on the side or in the lower back. Patients pain in abdominal it last 3 to 4 months.

Clinical finding:

patient no any past and present

Medical history. And no any past surgical history

Patient specific information: A 35 year female was admitted AVBRH hospital on a date 12/6/2021 with chief complete abdominal pain, fever Urine with blood (hematuria) On one side, you have low back ache. A bump on the side or in the lower back. Patients pain in abdominal it last 3 to 4 months.

Primary concerns and symptoms of the patient: A 35 yrs. Old female was visited in AVBR hospital OPD on date 12/06/2021 with chief complaint of abdominal pain, fever Urine with blood (hematuria) On one side, you have low back ache. A bump on the side or in the lower back. patients pain in abdominal it last 3 to 4 months.

Medical family and psychosocial history: Present case had no any medical history. In family history she is belong to nuclear family and her husband had medical history i.e. DM. She mentally stable, conscious and oriented. She was maintaining the good relationship with family members, doctors and nurses as well as other patients also.

Clinical findings: Present case was unhealthy, she was conscious and oriented to date, time and place. Her body built was moderate and she was maintained good personal hygiene. Her blood pressure was normal . 120/90mm//hg, plus rate is normal Urine with blood (hematuria) On one side, you have low back ache. A bump on the side or in the lower back. patients pain in abdominal it last 3 to 4 months.

Diagnostic assessment:

Family history

Patients family history no any medical and surgical history of patient family

Personal history

Patient no any past medical history and no any surgery history . Patient no any past psychiatric history

Physically examination

Height 150 cm

Weight 50 kg

Sonography



Blood Reports:

- White blood cells :16400 3,5
- Platelets: 246MCL.
- 3,500 to10,500cells/mcl 150,000to 450,000/mcl
- Haemoglobin 13.g/dl.
- 12.5 to 15.5g/dl
- Urea 18mg %. 14-23 mg
- Creatinine 1.4. mg % 0.7-11 mg
- Sodium 135mg/dl. 136-145mg /dl
- Potassium 3.5 mg/dl. 3.6to 5.2mg/dl

Other Investigations:

- Complete blood count
- CT scan
- Ultrasound of the abdomen and kidneys
- Urine examination
- Biopsy



Diagnosis:

After physical examination and diagnostic procedures, doctor diagnosed it as a case of Renal cell

Carcinoma.

Therapeutic intervention:

Patient was treated with radical nephrectomy. The entire kidney, as well as the fat surrounding it, was removed during radical nephrectomy. The kidney, the adrenal gland, surrounding tissue, and neighbouring lymph nodes are removed during surgery.

Medications:

Tablet Emest 4 mg

Tablet dolo 650 mg

Tablet limcee 500mg

Tablet pantozol 40 mg

Inj. Ceftriaxone 500 mg

Nursing perspectives: IV fluid was provided to maintain the fluid and electrolyte. Monitored input and output chart and vital signs per hourly.

Discussion:

This present case was admitted to the hospital with chief complaints abdominal pain, fever Urine with blood (hematuria) On one side, you have low back ache. A bump on the side or in the lower back. Patients pain in abdominal it last 3 to 4 months.⁶ After the physical examination and other tests finding the diagnosis are renal cell carcinoma. The most common method of diagnosis is CT scans or sonography. It is critical to recognise the disease early on so that therapy can begin as soon as possible.. Staging is a critical mechanism for determining

whether and where cancer has spread. Form 1 to 4, the stages are as follows: Stage 1When a tumour is confined to the kidney's tissues, it's called a kidney tumour. Stage 2 occurs when a tumour affects the kidney's fat or adrenal tissues; Stage 3occurs when a tumour has spread to the regional kidney nodes, lymph nodes, and kidney veins or vena cava, or when the tumour has implicated lymph nodes and kidney veins or vena cava; Stage 4 When a tumour has progressed to other organs (liver, colon, pancreas, or stomach) or to distant areas in the body, it is called metastasis.⁷ Renal cell carcinoma of the ovary has a clinical presentation that is similar to that of other ovarian clear cell cancers. Metastatic renal cell carcinoma was discovered in a patient with a right adnexal tumour and no other significant medical history. The tumor's gross appearance suggested it was a primary ovarian malignancy. However, morphological and immunohistochemical investigation indicated that a clear cell tumour with characteristics of renal cell carcinoma had invaded both ovaries. Following that, a kidney mass was detected. The clinical, histologic, and immunohistochemical characteristics of this tumour, as well as the characteristics of other clear cell neoplasms in the differential diagnosis, are discussed. Renal cell carcinoma can only be treated by surgical excision. The optimum means of cure for patients with localised disease appears to be early closure of the renal artery and vein, followed by radical nephrectomy with regional lymphadenectomy. Surgical extirpation should be tried even when the tumour affects the vena cava, surrounding organs, or a single kidney, as the results of more extensive surgery have been favourable. Radiotherapy has not been found to be beneficial as a postoperative adjuvant, and when used before surgery, it may reduce local recurrence but does not appear to increase five-year survival. A number of related studies to renal pathologies⁸⁻¹² and management¹³⁻¹⁴ were reviewed.

Various procedures can be performed during surgery. During a partial nephrectomy, a portion of the kidney is removed. During a nephrectomy, the entire kidney may be removed. Depending on how far the disease has progressed, more invasive surgery to remove surrounding tissue, lymph nodes, and your adrenal gland may be required. This procedure is known as a radical nephrectomy. Daisies or a transplant are required if both kidneys are removed.

Conclusion:

35 years old female suffering for Kidney cancer is another name for renal cell carcinoma. Patients done is radical nephrectomy . A radical nephrectomy is an inpatient procedure in which the entire kidney, as well as the fat surrounding it and, in certain cases. The fat around the adrenal gland and lymph nodes, as well as the adrenal gland and lymph nodes, are removed This surgery may be necessary if you have a kidney disease or damage, kidney cancer, or are donating a kidney

Renal cell carcinoma can only be treated by surgical excision. The optimum means of cure for patients with localised disease appears to be early closure of the renal artery and vein, followed by radical nephrectomy with regional lymphadenectomy. Surgical extirpation should be tried even when the tumour affects the vena cava, surrounding organs, or a single kidney, as the results of more extensive surgery have been favourable ... Radiotherapy has not been found to be beneficial as a postoperative adjuvant, and when used before surgery, it may reduce local recurrence but does not appear to increase five-year survival

References:

 Shuch B, Amin A, Armstrong AJ, Eble JN, Ficarra V, Lopez-Beltran A, Martignoni G, Rini BI, Kutikov A. Understanding pathologic variants of renal cell carcinoma: distilling therapeutic opportunities from biologic complexity. European urology. 2015 Jan 1;67(1):85-97.

- 2. Nair M. The renal system. Fundamentals of Anatomy and Physiology: For Nursing and Healthcare Students. 2016 Mar 30.
- 3. Koul B. Types of Cancer. InHerbs for Cancer Treatment 2019 (pp. 53-150). Springer, Singapore.
- 4. Orchard G, Muskett D, Nation B. Kidney and urinary tract. Cell Structure & Function. 2015:349
- Poppel HV, Nilsson S, Algaba F, Bergerheim U, Cin PD, Fleming S, Hellsten S, Kirkali Z, Klotz L, Lindblad P, Ljungberg B. Precancerous lesions in the kidney. Scandinavian Journal of Urology and Nephrology. 2000 Jan 1;34(205):136-65.
- 6. Mikhaylenko DS, Tanas AS, Zaletaev DV, Nemtsova MV. Application Areas of Traditional Molecular Genetic Methods and NGS in relation to Hereditary Urological Cancer Diagnosis. Journal of Oncology. 2020 Jun 17;2020.
- 7. Longacre TA, Gilks CB. Surface epithelial stromal tumors of the ovary. Gynecologic Pathology. London: Churchill Livingstone Elsevier. 2009 Jan 1:393-444.
- Prasad, Narayan, Mansi Bhatt, Sanjay K. Agarwal, H. S. Kohli, N. Gopalakrishnan, Edwin Fernando, Manisha Sahay, et al. "The Adverse Effect of COVID Pandemic on the Care of Patients With Kidney Diseases in India." KIDNEY INTERNATIONAL REPORTS 5, no. 9 (September 2020): 1545–50. https://doi.org/10.1016/j.ekir.2020.06.034.
- 9. Abbafati, C., Abbas, K.M., Abbasi-Kangevari, M.,2020b. Global burden of 87 risk factors in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. The Lancet 396, 1223–1249. https://doi.org/10.1016/S0140-6736(20)30752-2
- Agrawal, A., Keche, H.A., Adakane, R., 2019. A study of accessory renal arteries and its clinical implications. International Journal of Pharmaceutical Research 11, 1141–1144. https://doi.org/10.31838/ijpr/2019.11.01.200
- Alagh, A.R., Shukla, S., Acharya, S., Vagha, S., Palsodkar, P., 2019. Assessment of renal function in obese individuals. International Journal of Pharmaceutical Research 11, 1179–1186. https://doi.org/10.31838/ijpr/2019.11.01.209
- Hiwale, K.M., Sahu, P., Vagha, S., 2020d. Case report-primary renal lymphoma: A rare entity. Indian Journal of Forensic Medicine and Toxicology 14, 6714–6716. https://doi.org/10.37506/ijfmt.v14i4.12669
- Pattabiraman, S., Phatak, S.V., Patwa, P.A., Marfani, G., 2020. Bilateral sporadic renal angiomyolipoma. Ultrasonography and computed tomography imaging. Journal of Datta Meghe Institute of Medical Sciences University 15, 134–135. https://doi.org/10.4103/jdmimsu.jdmimsu_199_19
- Khatib, M.N., Shankar, A.H., Kirubakaran, R., Gaidhane, A., Gaidhane, S., Simkhada, P., Quazi, S.Z., 2018b. Ghrelin for the management of cachexia associated with cancer. Cochrane Database of Systematic Reviews 2018. https://doi.org/10.1002/14651858.CD012229.pub2