MCRN-LMP: New Nomenclature for MCRCC in latest edition of Blue Book

Dhiraj B. Nikumbh[1,*], Roopali D. Nikumbh[2]

[1]Professor, Dept. of Pathology, [2]Associate Professor, Dept. of Anatomy, ACPM Medical College, Dhule, Maharashtra

***Corresponding Author:**
Email: drdhirajnikumbh@rediffmail.com

Abstract

In 2016, World Health Association (WHO) published the revised classification of urogenital system. In this context, multilocular cystic renal cell carcinoma (MCRCC) diagnosis was altered by the terminology as multilocular Cystic Renal Neoplasm of Low Malignant Potential (MCRN-LMP) with ICD code-8316/1.

In this mini review we discussed the justification and need of such alteration and the background behind this; in view we published the article on MCRCC in 2011.

Keywords: Kidney, Renal tumors, Multilocular, Cystic, WHO

Introduction

Most of the post graduate and pathology scholars follows the blue book of WHO classification of urogenital system tumors (2004). It was modified with number of revisions in 2016.One of the alteration is replacement of MCRCC by MCRN-LMP.(1) The expertise in the field of urogenital pathology met in Zurich, Switzerland in 2015 in the conference of WHO to finalize these revisions suggested by eminent scholars in field of urogenital system due to number of papers on these rare entities.(1) There are lots of revisions in the newer WHO classification (2016) as compared to previous version of renal, penile and testicular tumors(2004).(1) With the reference to renal tumors; the modifications are hereditary leiomyomatosis, RCC syndromes, SDH deficient RCC, MCRN-LMP (ICD code 8316/1), tubulocystic RCC, clear cell RCC and acquired cystic with RCC along with grading system of WHO/ISUP(International Society of Urological Pathology).(1)

Case Report Commentary

We published a case report titled as 'Multilocular cystic RCC: an usual gross appearance' in OJHAS, Vol 10; Issue 1 in 2011 in a 70-year-old male.(2) The patient was presented with dull aching non radiating pain in left flank. On investigation it was confirmed left renal upper pole mass. Nephrectomy was performed and gross/microscopic findings were s/o MCRCC. The characteristic feature of MCRCC was multicystic tumor, cysts were separated by thin fibrocollagenous septa lined by aggregates of clear cells with nuclear grade 1.Cysts contains blood.(2) The patient has no evidence of metastasis/recurrence till date.

Discussion

MCRCC is an uncommon clinicopathological entity comprising 1-2% of all renal cancers.(1) In 2004, WHO classification of kidney tumors, MCRCC is a clinically rare and distinct variant of clear cell RCC with favorable prognosis.(3) MCRCC is referred in this classification as 15-25% of neoplastic clear cells should present in cyst wall with cystic component.(3) The revision of the 2004 WHO classification of renal tumors was performed on the facts and basic about clinicopathological and its outcome, epidemiology with genetics of these lesions.(1) ISUP in Van Couver conference laid the formulation and alteration of the 2016 WHO renal tumor classification and revisions of many entitites.(4)

The newer and added topics in the altered new classification 2016 of urogenital tumors:(4)

- Subtypes named according to basis of cytoplasmic features predominantly (e.g. clear cell and chromophobe RCC)
- Architectural characteristics (e.g. papillary RCC)
- Gross morphological tumor location (collecting duct and medullary type)
- On the basis of background(acquired cystic dysplasia with tumor)
- Molecular changes (MiT translocation and SDH deficient carcinomas)
- MCRN-LMP (ICD code-8316/1) due to its prognosis and future course.

Several database from the literature and many published papers states that there is no recurrence or metastasis in the multilocular cystic renal cell carcinoma.(1) In 2016, WHO altered the term MCRRC by multilocular cystic renal neoplasm-low malignant potential(MCRN-LMP) due to its non-metastatic and recurrence free course.(1)

The criteria proposed for MCRN-LMP in 2016 revised classification was as follows:(1)

- Tumor containing numerous cysts with low grade tumor cells in it (ISUP/WHO grade 1/2).
- Cysts are lined by single layer of tumor cells with abundant clear cytoplasm of low grading.
- Septa contain few groups of clear cells without expansible and bigger growth.

All these criteria were sufficed in our case and hence we are tried to elaborate on this new entity and discussed about it.

Conclusion

The aim of this mini review is to draw attention of the practicing urologists that MCRN-LPM is a least aggressive neoplasm with no recurrence and no metastatic potential after surgery. Hence conservative management may be advised to the patients of this rare entity.

References

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