Renal cell carcinoma (RCC) is the most common primary tumour of the kidney with multiple histological subsets. One of the relatively new subsets is a mucinous tubular and spindle cell carcinoma (MTSCC), which was first described in 1998. MTSCC was classified as a variant of renal cell carcinoma in the classification of World Health Organisation in 2004. Currently, there are approximately 100 cases of MTSCC reported in the literature. It is rare, unique polymorphous tumour of the kidney with a relatively indolent behaviour. MTSCC occurs throughout life (age range: 1782 years) and is more frequent in females.

Histologically, this tumour is characterized by an admixture of small, elongated tightly packed tubules and spindle cells that are present in a mucinous background. They have components involving mucin, tumor cells forming tubules, and spindle cells and resemble papillary RCC. However, chromosome 7 and 17 defects and chromosome Y deletion, typical of papillary RCC, are not observed in MTSCC. The tumour is considered to be a low-grade carcinoma with a favorable prognosis.

MTSCC usually presents as a solitary unilateral tumor. There is only one previous case report in the literature that describes a bilateral MTSCC presentation. This poster presentation will outline two bilateral MTSCC.