Renal Medullary Carcinoma

Renal medullary carcinoma is a rare, aggressive tumor of the kidney that is seen almost exclusively in young individuals with sickle cell trait. Most people who get this type of cancer are under forty years of age. It occurs more frequently in men then in women and it has never been seen in a young child.

Thankfully-this cancer is VERY RARE. However, it is so rare that there is no way to screen for it. Only, approximately 140 cases have been reported to date. We don’t even know how often it occurs.

The main symptoms of this cancer is bloody urine (called hematuria) and side or flank pain. If you have these symptoms and you have sickle cell trait, you should see your doctor or go to an emergency room.

Most tumors can be detected with computed tomography or magnetic resonance imaging. Unfortunately, it is a highly aggressive tumor and most patients have disseminated disease (spread in multiple organs) at the time of diagnosis. The median survival is approximately 15 weeks despite treatment.

Treatment options include radical nephrectomy, chemotherapy using regimens for transitional and renal cell carcinomas, and palliative radiation therapy.

Because of the rarity of the disease and the age range in which it can present, screening would not be cost effective (and likely would not be useful) in persons with sickle cell trait. However, as there is more information now available that all persons with sickle cell trait have an increased risk of chronic kidney disease, all persons with sickle cell trait over 10 years of age should likely undergo a screening urinalysis every year during their routine physical to assess for the presence of red blood cells. If patients have hematuria, they should be referred for renal ultrasound and nephrology for further assessment.