Reviewer's report

Title: Acute myeloid leukemia in a 38-year-old hemodialyzed patient with von Hippel-Lindau disease.

Version: 1 Date: 22 May 2013

Reviewer: Mariola Peczkowska

Reviewer's report:

Von Hippel – Lindau disease is a rare genetic disorder characterized by hemangioblastomas, renal cell carcinoma, pheochromocytomas, neuroendocrine and endolymphatic sac tumors. There has not been found any susceptibility to hematologic cancers in VHL disease.

This is a very interesting paper that describes a case of a 38-year-old male with von Hippel-Lindau disease and chronically hemodialyzed due to bilateral nephrectomy for renal cell carcinoma who also became ill with acute myeloid leukemia. It is worthy to note that no case of acute myeloid leukemia in hemodialyzed patient with VHL disease has been reported so far. It makes this case report interesting and important for clinical practice. It must be emphasized that discussion is very comprehensive. It is well known that mutations of the VHL gene disrupt the regulation of HIF resulting in overproduction of growth factors and inappropriate activation of angiogenesis in VHL-associated tumors but it is also known that many other HIF-independent functions of VHL protein have been identified which can also play role in carcinogenesis in VHL disease. Authors discuss all possible mechanisms of VHL gene defect which can lead to acute myeloid leukemia clearly and consistent.

The minor concern: page 4 line 2: should be: complex cardiac valves defect.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Declaration of competing interests:

I declare that I have no competing interests.