

The Use Of Ace Inhibitors Or Angiotensin II Receptor Blockers In Patients With Diabetic Nephropathy: A Quality Assessment Of An Internal Medicine Clinic

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Background: Diabetes Mellitus is a chronic medical condition with long-term impairment in multiple organ systems including the ophthalmologic, renal, cardiac, and neurological systems. About 30 to 40% of diabetics develop nephropathy. Diabetic kidney disease is the leading cause of End-Stage Renal Disease (ESRD) in developed countries, including the United States. Studies have shown that Angiotensin II Receptor Blockers (ARB) or Angiotensin-Converting Enzyme inhibitors (ACEi) offer renoprotective benefits, and slow the progression of diabetic nephropathy. Our Internal Medicine residents' clinic provides care to a large population of diabetics. Most of the patients are underserved and uninsured, as such they usually present in the later stages of diabetic disease progression when organ impairments have begun. We will be evaluating the effectiveness of the medicine clinic in implementing ACEi or ARB use in patients with diabetic nephropathy.

Methods: We selected a list of 93 patients with diabetic nephropathy who visited the Internal Medicine clinic between 2020 and 2022. The patient list was generated using the ICD-10 code for diabetic nephropathy. Patients who were allergic to ACEi or ARB were not included in the data. Data was manually extracted from each patient's chart.

Results: Out of the 93 patients with diabetic nephropathy, 73 (78.5%) were prescribed ACEi or ARB as part of the treatment of diabetic nephropathy. 20 (21.5%) patients did not receive ACEi or ARB.

Conclusion: In this evaluation, our results conclude that a large majority of our patients in the Internal Medicine residents' clinic were appropriately prescribed ACEi or ARB, in accordance with current guidelines for diabetics. Future analysis could also include exclusion criteria for those who've failed therapy secondary to allergy or drug interaction, compliance and economic barriers to use. Resident education specific to these guidelines could further improve the routine use of ACEi/ARB accordingly.