Evaluation of a physician education program on the use of statins and metformin in patients with type 2 diabetes.

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Background

- In a teaching-hospital system, ambulatory care pharmacists observed cases of metformin discontinuation upon basal insulin initiation and confusion with statin therapy in diabetic patients.
- Patients with type two diabetes mellitus (T2DM) are at increased risk of atherosclerotic cardiovascular disease.
- 2013 ACC/AHA guidelines recommend statin therapy to reduce this risk.
- 2015 ADA guidelines make recommendations for metformin and statin therapy in T2DM including:
  - Metformin may be continued once basal insulin therapy is initiated in T2DM.
  - eGFR is now recommended over Scr for renal dose adjustment of metformin.
  - Statin therapy is recommended in most patients with T2DM without contraindications.
- Pharmacist led education could help to improve prescriber knowledge and prescribing habits.

Purpose

- To assess the impact on prescriber knowledge of pharmacist led education on current guidelines for statin and metformin therapy in T2DM.

Methods

- Internal medicine and family medicine residents in a teaching-hospital system attended a pharmacist led education module on ACC/AHA and ADA recommendations for metformin and statin use.
- A ten-question multiple-choice test was developed and given before and after the presentation to assess understanding of these recommendations.

Results

- Of a total of 75 residents, 20 are family medicine residents and 55 are internal medicine residents.
- 74 (99%) residents participated in the pre-education test and 19 (25%) responded to the post-education test.
- Pharmacists-led education may increase prescriber understanding of metformin and statin use in T2DM, including metformin mechanism of action and contraindications as well as cholesterol management according to ACC/AHA guidelines; however, further investigation is warranted.
- Education did not improve resident understanding of statin recommendations from the 2015 ADA guidelines or resident ability to identify a high intensity statin.
- A limitation of this study is the significant decrease in resident participation in the post-education test. This is likely due in large part to the timing of the presentation.

Future Analysis

- Following IRB approval, two retrospective chart reviews will be conducted in patients age 19 or older with a diagnosis of T2DM requiring insulin therapy at two internal medicine clinics and one family medicine clinic.
  - The first will review patients seen in the 12 months prior to the education.
  - The second will review patients seen in the 3 months after the education to determine if prescribing habits change.

References


Presented at the 50th Annual ASHP Midyear Clinical Meeting; December 6-10, 2015; New Orleans, Louisiana