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Patterns of statin therapy prescribing among hospitalized patients with type 2 diabetes mellitus in two Malaysian tertiary hospitals (Article)

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Abstract

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Purpose: To assess the patterns of statin therapy prescribing among hospitalized patients with type 2 diabetes mellitus (T2DM) in two Malaysian tertiary healthcare institutions and to determine compliance with Malaysian treatment guidelines. **Methods:** A cross-sectional study was conducted from September to December 2016. The study involved hospitalized T2DM patients aged between 40 to 75 years recruited from the medical wards of two tertiary hospitals in the state of Pahang, Malaysia. Evaluation of statin prescribing was classified as appropriate (statin therapy was prescribed with no concurrent drug interactions) or inappropriate (not receiving any statins, although no contraindications), or potentially inappropriate (drug interactions detected or renal dose adjustment needed). **Results:** Among the 393 medical records screened, 65 % had a statin therapy prescription. The evaluation of statins prescribing showed that approximately 35 % of patients were not prescribed statins, contrary to national treatment guidelines. Twenty-six percent of the study cases were given drugs that interacted with statins. Renal dose adjustment of the given statin was needed in 5 % of patients. Finally, only one-third of the patients were prescribed appropriate statin doses. **Conclusion:** A significant portion of T2DM hospitalized patients did not receive their recommended statin therapy for cardiovascular disease prophylaxis. Closer monitoring and further dose adjustments are warranted to optimize statin therapy prescribing. Further interventions to improve statin prescribing should be considered. © 2017 The authors & Pharmacotherapy Group, Faculty of Pharmacy, University of Benin, Benin City, 300001 Nigeria.

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Author keywords

Cardiovascular diseases Prescribing patterns Statin therapy Type 2 diabetes

Indexed keywords

EMTREE drug terms: amlodipine atorvastatin colchicine ezetimibe fenofibrate gemfibrozil
hemoglobin A1c hydroxymethylglutaryl coenzyme A reductase inhibitor
low density lipoprotein cholesterol macrolide mevinolin pravastatin prednisolone
pyrrole derivative rosuvastatin simvastatin verapamil warfarin

EMTREE medical terms: adult aged Article cardiovascular disease chronic kidney failure cross-sectional study
drug interaction glucose blood level hospital admission hospitalization human
hypertension ischemic heart disease major clinical study
non insulin dependent diabetes mellitus prescription

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Chemicals and CAS Registry Numbers:

amlodipine, 88150-42-9, 103129-82-4, 736178-83-9; atorvastatin, 134523-00-5, 134523-03-8; colchicine, 64-86-8; ezetimibe, 163222-33-1; fenofibrate, 49562-28-9; gemfibrozil, 25812-30-0; hemoglobin A1c, 62572-11-6; mevinolin, 75330-75-5; pravastatin, 81093-37-0, 81131-70-6; prednisolone, 50-24-8; rosuvastatin, 147098-18-8, 147098-20-2; simvastatin, 79902-63-9; verapamil, 152-11-4, 52-53-9; warfarin, 129-06-6, 2610-86-8, 3324-63-8, 5543-58-8, 81-81-2

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
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