



Service Priorities and Programmes
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Severe Hypoglycaemia in Diabetics: Insight from 69 Cases in the Shatin District GOPCs

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Introduction

Hypoglycemia is an important complication in diabetic patients, which can lead to short- and long-term complications including the precipitation of CVA, ACS and neurocognitive dysfunction etc.

Objectives

• To identify the characteristics of type 2 DM patients from GOPCs who had experienced severe hypoglycaemia episodes requiring hospital care.

• To identify the underlying causes and contributing factors of developing hypoglycaemia in these patients in order to find out ways to lower the risk of severe hypoglycaemia

Methodology

All patients with regular follow-up for type 2 DM in the 4 GOPCs in Shatin district, and had developed severe hypoglycaemia requiring hospital care in the period of Oct 2014 to Sep 2015, were identified by CDARS.

Clinical notes, laboratory results, and information collected during DM complication screening (RAMP-DM) were analysed.

Result

• 69 DM patients followed-up by the 4 GOPCs in Shatin were admitted to either AED ward or Medical ward for management of severe hypoglycaemia in the one year period

• More than half were female (n=40, 58.0%), 47 patients (68.1%) were aged > 70 years old,

• 47 patients (68.1%) were either illiterate or only received primary education

• Only 25 patients (36.2%) were having too tight DM control (HbA1c < 6.5%), 21 patients (30.4%) were having suboptimal or poor DM control (HbA1c >7.0%).

• Recent increase in OHA or insulin (n=13, 18.8%), reduced oral intake or skipping meals (n=38, 55.1%), upper or lower respiratory infection (n=16, 23.2%), Gastroenteritis (n=7, 10.1%) were common precipitating factors. 2 patients wrongly took the discontinued anti-diabetic drugs, 2 patients had poor appetite during HP eradication therapy; 12 patients (17.4%) were having psychiatric disease or cognitive impairment.

• Interestingly, only 3 patients (4.3%) were old age home (OAH) resident.

• The 8 patients (11.6%) on insulin and the 18 patients (26.1%) on Max OHA +/- Januvia were the traditional high risk groups for hypoglycaemia. 12 patients (17.4%) were only taking low dose SU +/- Metformin

Conclusion:

Contrary to popular belief, patients with poor DM control and patients on low dose SU could develop severe hypoglycaemia. Education on sick day management should be intensified, especially for elderly patients and patients with low education level. Doctors should educate patients on hypoglycaemia management when stepping up OHA/insulin. After optimizing the dosage of Metformin, adding Pioglitazone or DDP4i instead of SU may help preventing hypoglycaemia in some cases. The regular meal time and close monitoring in OAH may help preventing severe hypoglycaemia.