



HOW HIGH IS YOUR PATIENT'S RISK FOR SEVERE HYPOGLYCAEMIA?

ADVERSE OUTCOMES OF SH

Neuroglycopenia, unconsciousness, seizure, injury, car accidents, higher risk for future SH, impaired hypoglycaemia awareness (IAH), possible cardiac arrhythmias, cognitive impairment and increased mortality

SEVERE HYPOGLYCAEMIA (SH)

Episodes of low blood glucose (BG) your patient is unable to self-treat because of impaired thinking or unconsciousness

THE GOAL

Best possible glucose control without SH

PRESENTING FEATURES TO CONSIDER

Not on insulin, sulphonylureas (SUs) or glinides

Hypoglycaemia awareness with classic symptoms (e.g. sweating, trembling) at 3.0 mmol/L or 54 mg/dL

All episodes symptomatic and self-treated

Infrequent (≤ 3 x/week) BG levels below target (< 3.9 mmol/L or < 70 mg/dL)

No episodes of SH in the past year

On insulin and/or SUs or glinides

More frequent (≥ 3 x/week) episodes, but > 3 mmol/L or 54 mg/dL

Reduction in classic warning symptoms for low blood sugar

A significant episode (< 3.0 mmol/L or 54 mg/dL) with no symptoms

One episode of SH in the past year

Not adjusting insulin for meals or exercise

Long duration of diabetes/insulin use

BG < 3 mmol/L or 54 mg/dL ≥ 3 x/week

More than one SH episode in the past year

Impaired Awareness of Hypoglycaemia (IAH)

Lack of concern about SH or failure to change high risk behaviours

Excessive alcohol use

Older age (> 70), impaired memory or dementia

Taking other medications that lower BG

RECOMMENDATIONS TO CONSIDER

Encourage patient to:

Measure BG when low blood sugar symptoms occur and check for recovery 15 minutes after treatment

Always carry/keep fast acting carbohydrates

Take carbohydrate to prevent hypoglycaemia when below target

Always treat low BG immediately

Same as for low risk, plus:

Increase number of daily BG checks (≥ 4 x/day)

Check BG before driving and during long drives

Review insulin/medication regimen and patient's hypoglycaemia knowledge

Educate patient on hypoglycaemia avoidance and consider referral to a diabetes educator

Check kidney, thyroid and GI function and other endocrine deficiencies

Consider education in carbohydrate counting/insulin adjustment

Prescribe glucagon kit and provide training in use

Same as for low and moderate risk, plus:

Consider changing medications/insulin regimens to lower risk (avoid SUs, glinides and non-analogue insulins, if possible)

Avoid all episodes (< 3 mmol/L or 54 mg/dL) to restore symptoms

Prescribe glucagon often so it does not expire and ensure family members/partners are trained to use it

Educate family on hypoglycaemia prevention/treatment

Consider continuous glucose monitoring or low glucose suspend devices

RISK LEVEL
LOW



RISK LEVEL
MOD



RISK LEVEL
HIGH



This flyer is intended to provide information on factors that are often associated with increased risk for severe hypoglycaemia (SH), as well as recommendations often associated with reduced risk. The presence of any specific risk factor does not necessarily mean that a given individual is at high risk. It is also the case that following any specific recommendation does not necessarily insure that an individual will not experience SH. Other factors relevant to an individual's situation need to be taken into consideration when assessing risk level and a clinical plan. This is an educational tool and guidance for an initial screening of risk factors and possible recommendations.