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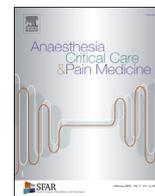
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Guidelines

Perioperative management of adult diabetic patients. The role of the diabetologist



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ABSTRACT

A patient should be referred to a diabetologist perioperatively in several circumstances: preoperative recognition of a previously unknown diabetes or detection of glycaemic imbalance (HbA1c < 5% or > 8%); during hospitalisation, recognition of a previously unknown diabetes, persisting glycaemic imbalance despite treatment or difficulty resuming previously used chronic treatment; postoperatively and after discharge from hospital, for all diabetic patients in whom HbA1c is > 8%.

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1. How do we view the role of the diabetologist?

Several studies have highlighted the beneficial effects of referring a patient to a diabetologist in the perioperative period (before, during and after hospitalisation), as seeking a consultation offers the opportunity to optimise treatment as well as to initiate, update or complete the education of the patient regarding management of his (her) disease.

In the preoperative period, the general practitioner or the anaesthetist should ask a diabetologist for advice if diabetes is detected or if, in a known diabetic, significant glycaemic imbalance

is observed, i.e. frequent or asymptomatic hypoglycaemic episodes (HbA1c < 5%), mean blood sugar level > 1.80 g/L (10 mmol/L) or HbA1c > 8%. An intensification of treatment is then necessary to improve glycaemic control and reduce the risk of surgical complications.

During the hospital stay, therapeutic management by a diabetologist also appears to be beneficial. It has been shown that therapeutic management by a diabetologist during hospitalisation, not directly linked to the diabetes, leads to better glycaemic control [1], fewer hospitalisations for diabetes [1,2], a reduction of the duration of hospitalisation [2] and lower healthcare costs [2]. For example, in diabetic patients admitted to the hospital for reasons other than diabetes, consultation with a diabetologist reduced the mean duration of stay from 8.2 days to

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5.5 days [3]. It is necessary to ask a diabetologist for advice if diabetes is discovered during hospitalisation or if glycaemic imbalance is demonstrated by blood sugar levels > 2 g/L (11 mmol/L), HbA1c $> 9\%$ or if the patient has difficulties restarting previous treatment.

2. Overall

It is advisable to refer a patient to a diabetologist in the following situations:

- known diabetes with preoperative glycaemic imbalance (HbA1c $< 5\%$ or $> 8\%$);
- diabetes discovered during hospitalisation or during the anaesthesia consultation;
- diabetes with glycaemic imbalance during hospitalisation (HbA1c $> 9\%$) or difficulty resuming previous treatment;
- blood sugar level > 3 g/L (16.5 mmol/L) during ambulatory surgery;
- after the patient has left hospital for all diabetic patients with HbA1c $> 8\%$.

Disclosure of interest

The authors declare that they have no competing interest.

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References

- [1] Koproski J, Pretto Z, Poretsky L. Effects of an intervention by a diabetes team in hospitalized patients with diabetes. *Diabetes Care* 1997;20:1553–5.
- [2] Levetan CS, Passaro MD, Jablonski KA, Ratner RE. Effect of physician specialty on outcomes in diabetic ketoacidosis. *Diabetes Care* 1999;22:1790–5.
- [3] Levetan CS, Salas JR, Wilets IF, Zumoff B. Impact of endocrine and diabetes team consultation on hospital length of stay for patients with diabetes. *Am J Med* 1995;99:22–8.