

1,5-Anhydroglucitol (1,5-AG) Diabetes Monitoring

- ✓ Assists in the assessment and management of diabetes mellitus
- ✓ Reflects average blood glucose levels over two weeks

INTRODUCTION

1,5-anhydroglucitol (1,5-AG) testing assists in the assessment and management of patients with diabetes mellitus to detect potentially damaging post-prandial blood glucose excursions.

There is evidence that marked degrees of post-prandial hyperglycaemia may be responsible for unpredicted vascular damage, poor cardiovascular outcomes, stroke, dementia, and increased risk of death in patients whose HbA1c levels (which reflect average blood glucose) have been relatively acceptable.

Poor post-prandial glucose control may not be apparent from infrequent finger-prick glucose, fasting and random blood glucose levels, and HbA1c results.

ABOUT THE TEST

The GlycoMark test reflects the average maximum blood glucose levels over the two week period prior to the time of sample collection. This is independent of other measures of glucose control including oral glucose tolerance tests, HbA1c and fructosamine. Furthermore, this test has been studied in various groups including patients of all ages with type 1, type 2 and gestational diabetes, and patients with kidney disease.

INDICATIONS FOR ORDERING

If the HbA1c indicates poor diabetic control, the 1,5-AG will add limited information. It would be appropriate to strive to achieve acceptable HbA1c results first.

However, if the HbA1c appears acceptable but there are other concerns regarding adequacy of glucose control or even as a regular "spot-check", 1,5-AG may be performed to check on adequacy of post-prandial control.

TEST LIMITATIONS

Low GlycoMark values can occur in Stage 4 or 5 kidney disease (eGFR below 30 mL/min), advanced liver disease and during pregnancy.

The diabetes drugs acarbose (Glutabay) and SGLT2 inhibitors (such as Invokana) cause low GlycoMark values. The Chinese medicines Polygala, Tenuifolia and Senega Syrup may cause high GlycoMark values.

HOW TO ORDER 1,5-ANHYDROGLUCITOL

The test is performed on serum and no pre-test preparation is required.

Request "1,5-AG" or "Glycomark".

TURNAROUND TIME

Tests are offered weekly with results available within seven days.

COST

Currently there is no Medicare rebate for 1,5-AG and as such, Tasmanian Medical Laboratories will charge an out-of-pocket fee of \$40.00.*

FURTHER INFORMATION

For further information please contact your Medical Liaison Officer or email enquiries@tmlpath.com.au.

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