

MANAGEMENT OF DIABETIC PATIENTS IN RADIOLOGY

Edition 2

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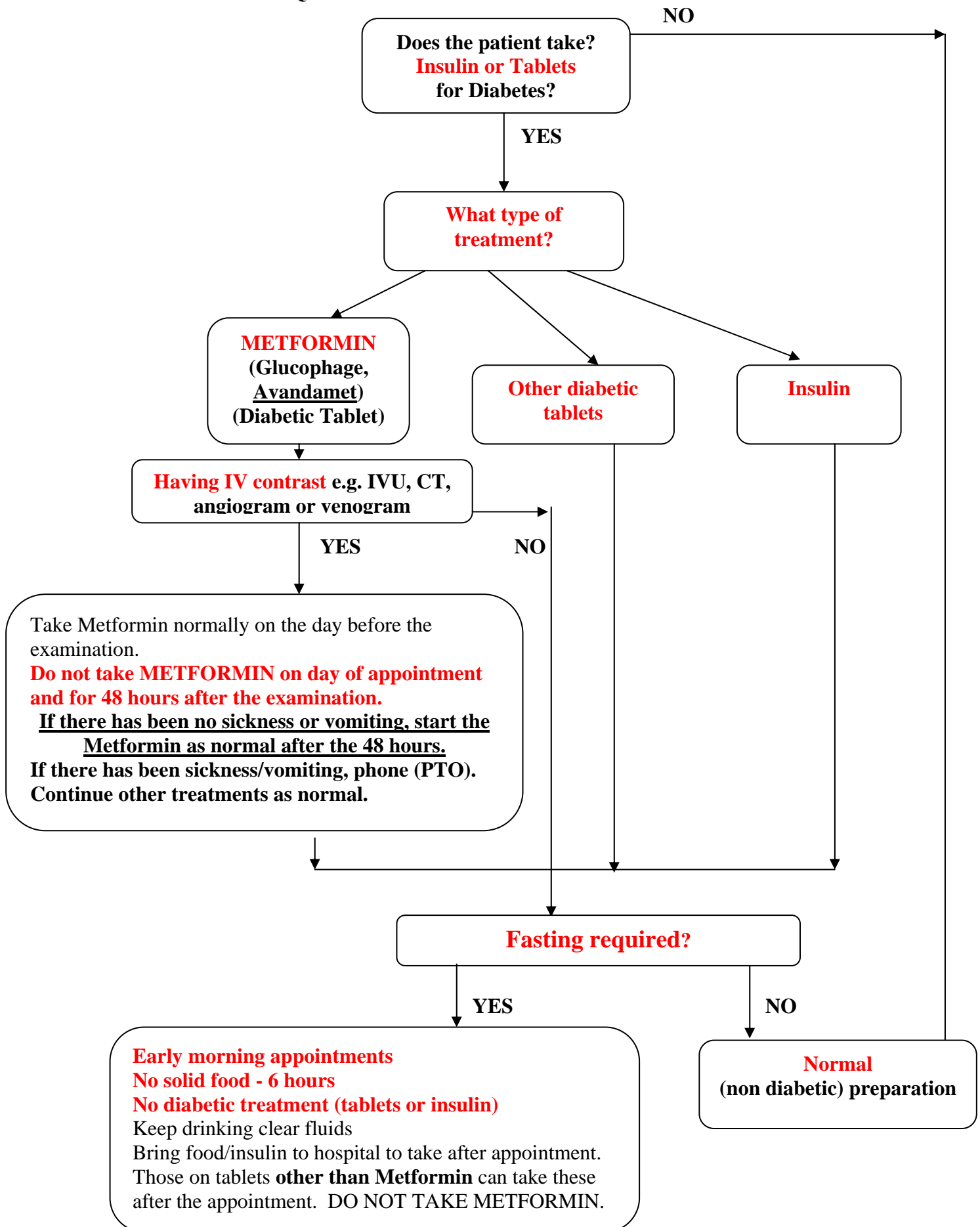
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Department Managers
Radiology Nursing Staff
Office Managers

Summary of Changes since previous edition

The procedure to be followed where the patient has taken Metformin has been updated in line with current College recommendations and following local clinical advice.

MANAGEMENT OF DIABETIC PATIENTS IN RADIOLOGY

TELEPHONE ENQUIRIES



Diabetic Protocols

Diet Controlled Diabetics

Follow the instructions as given in letter.

Appointment must be moved to early a.m. and patients should bring some food with them to eat after the examination.

IVU patient prep changes - **patients may drink water. Appointment must be changed to 8.45 a.m.**

MRI patients prep changes - for patients who need to starve, this should be for 2 instead of 4 hours.

ANGIOGRAPHY - IN ALL CASES CHECK WITH ROOM 10/3 (FRH) OR WITH APPROPRIATE RADIOLOGIST (RVI).

Insulin Controlled Diabetics

Follow the instructions as given in the letter.

Appointment must be moved to early a.m. Patients should omit insulin on morning of examination but bring insulin with them and something to eat. Food and insulin should be taken immediately after the examination.

MRI patients - seek advice from MRI team.

ANGIOGRAPHY - IN ALL CASES CHECK WITH ROOM 10/3 (FRH) OR L2 (LW RVI), OR WITH APPROPRIATE RADIOLOGIST.

Tablet Controlled Diabetics **BUT NOT METFORMIN (Glucophage, Avandamet)**

Follow instructions as given in the letter.

Appointment must be moved to early a.m.

Patients should omit tablets on morning of scan but bring tablets and something to eat with them.

These should be taken immediately after the examination.

IVU patients prep changes - patients may drink water.

Appointment must be moved to 8.45 a.m.

Patients should omit tablets but bring tablets and something to eat with them.

These should be taken immediately after the examination.

MRI patients - seek advice from MRI team.

ANGIOGRAPHY - IN ALL CASES CHECK WITH ROOM 10/3 FRH, LW2 RVI OR WITH APPROPRIATE RADIOLOGIST.

Metformin (Glucophage, Avandamet) Controlled Diabetics

Metformin is not recommended for use in diabetics with renal impairment, because it is excreted exclusively by the kidneys. Accumulation of Metformin may result in the development of lactic acidosis, a serious complication, following administration of contrast medium. Although the incidence of lactic acidosis following contrast in patients who have taken Metformin is extremely low, extra care should be exercised with these patients.

For contrast examinations (e.g. IVU, CT, angiography etc) there is a risk of a reaction.

The patient should take Metformin (Glucophage, Avandamet) normally on the day BEFORE the examination. **They SHOULD NOT take Metformin on the day of the examination and for 48 hours after the examination.** If there has been no sickness or vomiting, they can start taking their Metformin tablets as normal after the 48 hours.

They must tell the Radiologist / Radiographer that they are Metformin Diabetic.

ANGIOGRAPHY - IN ALL CASES CHECK WITH ROOM 10/3 (FRH) OR WITH APPROPRIATE RADIOLOGIST (RVI).

Procedure to be followed where the patient has taken Metformin

There are occasions where a patient requiring contrast administration has taken Metformin of the day of the examination.

If serum creatinine is **known to be normal** and a low volume of contrast agent (up to 100 ml) is to be administered **intravenously**, no special precautions are required. The examination may proceed and the patient may take their medication as normal after the procedure.

If serum creatinine is **known to be normal**, but **more than 100 ml** of contrast agent is to be administered, or the contrast agent is administered by an **intra-arterial route**, Metformin should be withheld for 48 hours after the procedure. If there has been no sickness or vomiting, they can start taking their Metformin tablets as normal after the 48 hours.

Where a patient requiring contrast administration has taken Metformin of the day of a **routine** 'contrast' examination, and serum creatinine is **not known to be normal**, the examination may be cancelled and a new appointment arranged. Alternatively, the examination can be delayed whilst a creatinine is measured.

Where a patient requiring contrast administration has taken Metformin of the day of an **urgent** 'contrast' examination, this should be discussed with a radiologist. As Metformin is not normally prescribed to patients with renal impairment, the risk of reaction following administration of contrast is low. However, the need for the

contrast agent should be re-assessed. **If the radiologist decides that, in the patient's best interests, the examination should proceed and administration of a contrast agent is necessary, Metformin should be withheld until renal function has been assessed. A blood sample may be taken by the radiologist at the time of the examination, and appropriate action taken when the results are available. Alternatively, the need to assess renal function should be communicated with medical staff responsible for the patient's care.**

Details of the arrangements made for such patients should be documented in the radiology report.

Sickness or vomiting

If a Metformin controlled diabetic suffers from sickness or vomiting in the 48 hours after a contrast examination, they should not take their Metformin. Between 9am and 5pm, they should phone the department and discuss with nursing staff or a radiologist. Alternatively they could contact the Diabetic Clinic. After 5pm and before 9am, they will have to contact the RMO via switchboard. They will need to have their Us&Es and blood sugar checked. If these are abnormal, they should contact the Diabetic Clinic during office hours, or the RMO outside office hours.

PICOLAX

DIABETIC PATIENTS WHO REQUIRE PICOLAX PREP NEED ADMISSION.
APPOINTMENT CLERK TO LIAISE WITH RELEVANT SECRETARY TO
ARRANGE 2 DAY STAY.

IN ALL CASES "DIABETIC ON DIET/INSULIN/TABLET/METFORMIN"
MUST BE RECORDED ON THE PATIENTS REQUEST CARD.

**TELEPHONE ENQUIRIES REGARDING PATIENTS TAKING
METFORMIN (GLUCOPHAGE, AVANDAMET)**

Metformin is most commonly taken by diabetic patients to control blood sugar. Occasionally, it can also be taken for other conditions, including obesity, Polycystic Ovary Syndrome (or Disease), abnormal ovulation, infertility, HIV Lipodystrophy Syndrome.

Patients who are to undergo an examination requiring injection of contrast medium, e.g. CT, IVU, Angiography, Venography should be asked if they are taking metformin. If yes, they should take their metformin as normal on the day before the appointment. They should not take their metformin on the day of their appointment, or for 48 hours after the examination.

If a patient, who normally takes Metformin, suffers from sickness or vomiting in the 48 hours after a contrast examination, they should not take their Metformin. Between 9am and 5pm, they should phone the department and discuss with nursing staff or a radiologist. Alternatively they could contact the Diabetic Clinic. After 5pm and before 9am, they will have to contact the RMO via switchboard. They will need to have their Us&Es and blood sugar checked. If these are abnormal, they should contact the Diabetic Clinic during office hours, or the RMO outside office hours.