

Iodinated contrast media are commonly used in radiological investigations. They are generally safe although adverse reactions are occasionally encountered following contrast medium injection.

1. Mild reactions – Mild reactions are self-limited and usually no medical management is required. These mild reactions include limited urticaria, itchiness, nausea, vomiting, sneezing, coughing, feeling of warmth, conjunctivitis, rhinorrhea, etc.
2. Moderate and severe reactions – These reactions usually require medical treatment and can even cause harm. For example, diffuse urticaria, facial oedema, chest pain, shortness of breath, wheezing, hypotension or hypertension, irregular heartbeats, etc. Overall acute adverse reaction rate is 0.7%, while incidence of serious acute reactions is 4 in 10,000.
3. Death – Death related to administration of intravascular contrast medium is about 2.1 in 1,000,000. Nearly all life-threatening contrast reactions occur within the first 20 minutes after contrast medium injection.
4. Delayed adverse reactions – Delayed adverse reactions may occur from one hour to up to one week following contrast medium injection. These are commonly skin reactions and include urticaria, rash and itchiness. Rare delayed reactions include iodide “mumps” and acute joint pain.
5. Contrast extravasation – Extravasation of contrast media is a potential complication that has an overall incidence of less than 1% and is due to leakage of contrast media to soft tissue adjacent to the injection site. Extravasation of small amount of contrast media may result in swelling and/or pain, and is commonly self-limited. More severe injuries may result in skin ulceration, tissue necrosis and compartment syndromes.
6. Lactic acidosis - Diabetic patients taking Metformin have the potential risk of developing lactic acidosis following contrast medium injection, in particular in patients with impaired renal functions. Reported incidence is less than 8.4 cases per 100,000 patient years. Patient mortality rate is about 50%.

Before Procedure

- Steroid Premedication – If you have previous allergic history to contrast medium, your doctor will prescribe you with steroid premedication before the scan.

Adults - Two-Dose Regimen:

- ✓ 12 hours (or at least) and 2 hours prior to investigation.
- ✓ 32 mg methyl-prednisolone or 40 mg prednisolone per oral dose.

Children - Three-Dose Regimen:

- ✓ 13, 7 and 1 hours prior to investigation.
- ✓ Please confirm dosage with your referring physician.

- For diabetic patients on Metformin medication, stop Metformin at time of fasting or 4 hours before radiological investigation. Patient with normal renal function can resume Metformin in 2 days (48hrs) after contrast administration. For patient with impaired renal function, there is increased risk of lactic acidosis and further impairment of renal function, patient should withhold Metformin and go back to clinical unit to reassess renal function.

After Procedure

- You will be asked to rest in the waiting area for at least 20 minutes after the investigation prior to discharge from the department. During this period, radiology staff (radiologist/ radiographer/ nurse) will monitor you for the above-mentioned signs and symptoms of adverse reactions.

Should you have any queries, please consult your doctor-in-charge

Information provided by the Department of Radiology, Queen Mary Hospital




Queen Mary Hospital

接受動脈或靜脈注射碘化造影劑



病人須知 Receiving Intravascular Iodinated Contrast Medium

 瑪麗醫院 Queen Mary Hospital	Pamphlet Topic & Department Code
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碘化造影劑是 X-光檢查常用的造影劑。一般來說，碘化造影劑是一種安全的藥物，但有時亦可能會引起以下副作用：

1. 輕微副作用 - 其症狀均屬暫時性及會自行痊癒，無需特別治理。常見例子有輕微紅腫及痕癢、作嘔、嘔吐、打噴嚏、咳嗽、熱暖感覺、結膜炎、流鼻涕等。
2. 中度及嚴重副作用 - 此類症狀通常都要延醫診治，更可能會導致嚴重副作用反應。常見例子包括瀰漫性蕁麻疹、面部水腫、胸口痛、呼吸急促、氣喘，血壓上升或下降、心律不調。整體之急性不良反應率為零點七個百分點而嚴重急性不良反應率則為一萬分之四。
3. 死亡 - 因注射碘化造影劑而導致死亡的個案率為百萬分之二點一。而大部份危及生命的造影劑反應會在注射造影劑後二十分鐘內發生。
4. 延遲副作用 - 延遲副作用反應亦可能會於注射造影劑後一小時甚至一星期後發生。症狀包括蕁麻疹、皮膚紅腫及痕癢。唾液腺疼痛及急性關節痛也偶爾會發生。
5. 造影劑外滲 - 注射造影劑時，可能會出現外滲的情況。其機會率一般少於百分之一。造影劑外滲是由於有部份造影劑於注射時流入注射部位附近的軟組織所引起的併發症。微量的造影劑外滲會導致注射部

出現浮腫，輕微不適或痛楚，但這種現象一般會在數小時至數天內消失。嚴重的外滲情況可能會導致皮膚潰傷、組織壞死及骨筋膜室綜合症等情況。

6. 乳酸性酸中毒 - 有報告顯示服用二甲雙胍 (Metformin) 及患有腎病之糖尿病人於注射碘化造影劑後會產生乳酸性酸中毒的危險。在十萬個病患個案當中，發生乳酸性酸中毒的機會率則低於八點四，而發生個案的死亡率則為百分之五十。

檢查前

- 類固醇術前用藥 - 如果你對造影劑有過敏反應，你的醫生會給你處方類固醇於檢查前服用。

成人 - 兩劑量方案

- ✓ 於檢查 12 小時（至少）和 2 小時前服食。
- ✓ 每次口服劑量 32mg 甲基強的松龍(methyl-prednisolone) 或 40 mg 潑尼松(prednisolone).

兒童 - 三劑量方案

- ✓ 於檢查 13 小時、7 小時和 1 小時前服食。
- ✓ 請與你的醫生確認劑量。

- 正在服用二甲雙胍 (Metformin) 的糖尿病患者，應在禁食或進行檢查四小時前停止服用二甲雙胍(Metformin)。如腎功能正常，病人可在兩天(48 小時)後繼續服用二甲雙胍 (Metformin)。如病人的腎功能低於標準，病人出現乳酸性酸中毒和腎功能繼續下降的風險會增加，病人應停止服用二甲雙胍 (Metformin)，及前往主診部門作腎功能檢查。

檢查後

- 在你離開本部門之前，你會被要求等候區休息最少 20 分鐘。在此期間，放射科工作人員（放射科醫生/放射師/護士）會注意你有沒有上述的副作用症狀和體徵。

如有任何查詢，請聯絡你的主診醫生

以上資料由瑪麗醫院放射科提供。