



## Practice sting Anaphylaxis in known chlorhexidine allergy

Allergies to substances in medicines or medical devices are common. For this reason, it is self-evident that a check should be carried out on possibly existing allergies before prescribing or administering a medicine or a medical device. However, this check is not always performed, with all its consequences.

### Notification

The Netherlands Pharmacovigilance Centre Lareb received a report of an anaphylactic reaction following administration of Instillagel® in a patient with a known chlorhexidine allergy. It concerned an elderly patient who had a urinary catheter inserted using the gel. Ten minutes later, an anaphylactic shock developed. The patient had to be resuscitated. Two months later, the patient died from the effects.

### Analysis

Instillagel® is a lubricant with a disinfecting and local anaesthetic effect for the insertion of catheters. It contains the active substances chlorhexidine and lidocaine [1]. A systemic allergic reaction is a known adverse effect of Instillagel®. Hypersensitivity to chlorhexidine is a contraindication to the use of this agent [1]. Hypersensitivity reactions to chlorhexidine can range from a mild skin reaction to life-threatening anaphylaxis [2]. Given the widespread use of chlorhexidine in healthcare, exposure to chlorhexidine is common [3]. It is not known exactly how often a chlorhexidine allergy occurs. Although this allergy is receiving increasing attention, it is probably underreported [2,3].

The Netherlands Pharmacovigilance Centre Lareb has received two previous reports of an anaphylactic reaction when using Instillagel®. One report stated that a chlorhexidine allergy was later diagnosed. The other report did not specify which substance caused the anaphylaxis [4]. In addition, Lareb received a notification based on a published case [5].

The above notification shows that people are not always aware of a chlorhexidine allergy. The analysis of this notification by the care team points to various factors that led to this incident. One of the factors was the lack of knowledge about the occurrence of a chlorhexidine allergy, both in this particular patient and in general. In addition, there was a lack of knowledge about the presence of substances that can cause an allergic reaction in medicines and medical devices.

### Recommendations

#### For all healthcare professionals

- Be aware that medicines and medical devices can contain substances to which the patient may be hypersensitive.
- Inquire about allergies and ensure that (possible) allergies are properly recorded in the electronic patient file via the appropriate registration module.
- When using medicines or medical devices for which no order is issued, check whether the patient is allergic to them. Because in this situation no automated medication monitoring is carried out.

### References

1. Summary of product characteristics via [Geneesmiddeleninformatiebank](https://www.geneesmiddeleninformatiebank.nl).

2. Chiewchalernsri C, Sompornrattanaphan M, Wongsas C, Thongngarm T. Chlorhexidine Allergy: Current Challenges and Future Prospects. *J Asthma Allergy*. 2020 Mar 9;13:127-133. doi: 10.2147/JAA.S207980. PMID: 32210588; PMCID: PMC7069565.
3. Opstrup MS, Jemec GBE, Garvey LH. Chlorhexidine Allergy: On the Rise and Often Overlooked. *Curr Allergy Asthma Rep*. 2019 Mar 14;19(5):23. doi: 10.1007/s11882-019-0858-2. PMID: 30874959.
4. The Netherlands Pharmacovigilance Centre Lareb database via [Lareb](#).
5. Ramselaar CG, Craenen A, Bijleveld RT. Severe allergic reaction to an intraurethral preparation containing chlorhexidine. *Br J Urol*. 1992 Oct;70(4):451-2. doi: 10.1111/j.1464-410x.1992.tb15813.x. PMID: 1450864.