

# CPG on Xerostomia and hyposialia related to medication and polypharmacy

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## Summary

### 1. Justification

These clinical practice guidelines are intended for dentists, dental specialists and oral hygienists. These guidelines have been developed by a Guidelines Development Committee (GDC) from the oral care institution Kennisinstituut Mondzorg (KIMO), chaired by Prof. C. de Baat, former Professor of Gerodontology.

### 2. Introduction

Xerostomia and/or hyposialia are common in (elderly) patients who take (various) medication. Xerostomia and/or hyposialia are related to impaired oral health, for example due to the development of caries, including root caries. These practice guidelines describe with which medications oral health care professionals must be alert for problems associated with xerostomia and/or hyposialia, which policy measures are recommended in such cases (frequency of the periodic oral examination, use of saliva substitutes and saliva stimulants and other preventive measures) and how to communicate about this (with the patient and with other health care professionals).

### 3. Recommendations

Key questions were drawn up for these guidelines, which have been worked out using evidence and considerations by experts in the Guidelines Development Committee. The key questions and the recommendations are outlined below.

#### Identifying problems

Key question 1: When taking which medicinal products (types and/or quantity) must oral health care professionals be alert for problems associated with xerostomia and/or hyposialia?

#### Recommendations:

Oral health care professionals must be alert for the development of xerostomia and/or hyposialia. If a patient mentions that they are troubled by a dry mouth or when signs of oral dryness are noticed during an oral examination, the advice is for the oral health care professional to find out whether the patient takes medicinal products for which it is known that they can cause xerostomia and/or hyposialia. It is then also indicated to determine and assess the saliva secretion rate.

Oral health care professionals must be alert for the development of xerostomia and/or hyposialia in patients with polypharmacy.

#### Preventive measures

Key question 2: Which (preventive) measures must be recommended for patients who have xerostomia and/or hyposialia as a consequence of taking medication that is associated with xerostomia and/or hyposialia?

#### Recommendations:

The recommendation for patients who show signs of hyposialia-associated impairment of teeth is to reduce the current interval between two periodic oral examinations.

The recommendation for patients with xerostomia is to determine the saliva secretion rate at rest and after stimulation.

It becomes clear from the literature that it is useful to recommend the use of a saliva stimulant or a saliva substitute to patients with xerostomia and/or hyposialia. The saliva stimulant or saliva substitute that is perceived as being effective strongly depends on the patient's preference and the residual secretory function of the salivary glands. If a certain product is ineffective for a patient, it does not automatically mean that a different product, including a similar product, is also ineffective for that patient. It is important to evaluate the effectiveness of the product together with the patient and, if desired, change to a different product.

The recommendation for patients with medication-associated hyposialia is to advise using a toothpaste with 5,000 ppm fluoride, an acidity-neutral mouthwash that contains fluoride or an acidity-neutral fluoride gel, in addition to good oral care. Based on the residual saliva secretion, the level of oral hygiene and the patient's preference, it must be determined for every patient individually which of these three products would be the best option. The type of fluoride administration depends on the level of oral hygiene and the degree of hyposialia. In addition, the use of chlorhexidine (vener, gel or mouthwash) may be considered.

The recommendation for patients with xerostomia is to determine the saliva secretion rate at rest and after stimulation to assess which fluoride policy must be implemented.

## Communication

**Key question 3:** For which medicinal products is it recommended to point out the potential side effect of xerostomia and/or hyposialia when prescribing/supplying the product, so that (preventive) measures can be taken to prevent xerostomia and/or hyposialia, for example?

### Recommendations:

Patients who use medication that is associated with xerostomia and/or hyposialia (see module 1) have an increased risk of developing xerostomia and/or hyposialia and the associated consequences for oral health.

It is recommended to inform these patients about the relationship between xerostomia/hyposialia and oral health and the options of preventive measures.

Dentists and oral hygienists will inform these patients about this when:

- there are signs of erosion and/or caries
- evaluating the medication overview in the patient file.

The prescribing practitioner and the pharmacist can also inform the patients of this so that these patients can consult their dentist when xerostomia-associated problems develop.

It is recommended to give these patients an information letter, which may be digital, to support this information.

**Key question 4:** In which instances of medication-associated xerostomia and/or hyposialia is consultation between dentist and prescribing practitioner and/or pharmacist recommended to discuss potentially adjusting (or stopping) the medication with the aim of limiting/preventing xerostomia and/or hyposialia?

### Recommendations:

As soon as a patient is diagnosed with medication-associated xerostomia and/or hyposialia (see module 1), measures (see module 2) are indicated.

In case of diagnosed hyposialia, dentists can, in addition to implementing the (preventive) measures outlined in module 2, have a discussion with the prescribing practitioner and/or the pharmacist.

The aim is to limit or remedy the hyposialia by adjusting the medication. Perhaps one or more medicinal products that contribute to the hyposialia can be stopped or replaced by a different medicinal product that does not lead to this side effect, or that reduces the severity of this side effect. It is also possible to discuss whether the intake moment for one or more medicinal products can be altered or whether the dosage can be reduced. In case of diagnosed xerostomia, this discussion with the prescribing practitioner and/or the pharmacist is also advised if the (preventive) measures described in module 2 have been implemented but did not help.

If the medication has been adjusted following this discussion, the relevant dentist will evaluate the effect by asking the patient for their experiences and by determining the saliva secretion rate at rest and after stimulation. The dentist will inform the prescribing practitioner and/or the pharmacist of this evaluation. If the results are adequate, the discussion will be considered concluded. If the results are inadequate, further discussion can take place between the dentist, the prescribing practitioner and the pharmacist.

#### 4. Complete guidelines

The complete Clinical Practice Guidelines on xerostomia and hyposialia related to medication and polypharmacy can be found on <https://www.hetkimo.nl/richtlijnen/xerostomie-en-hyposialie-gerelateerd-aan-medicatie-en-polyfarmacie/>.