

The fast bacteria test for the dental surgery

Life needs balance. Not surprisingly, the work-life-balance is being increasingly recognized. A busy day's stress level, unhealthy and unbalanced eating habits, smoking, medical conditions, medication and lack of exercise weaken us.

Because our oral cavity is inhabited by both favorable as well as not only aggressive bacteria, it is so important to balance this weakness with daily dental care. This can ideally be achieved with a meticulous home-based oral care, which includes the teeth as well as the gums and the tongue. Inadequate oral hygiene may lead to gingivitis and furthermore to periodontitis. The professional prophylaxis expert can help to choose „best“ oral care equipment for each individual patient.

This test method captures only living bacteria of the highest pathogenicity. These include:

Aa	Aggregatibacter actinomycetemcomitans
Pg	Porphyromonas gingivalis
Tf	Tannerella forsythia
Td	Treponema denticola
Pi	Prevotella intermedia

Take care of your gums!

Healthy gums will not bleed unless injured. Sick gums, on the other hand, are most often red and / or swollen. Our patients should be sensitized to pay attention to their gums, to clean carefully and become aware and react to the taste or sight of blood.

But what if despite optimal domestic and professional care the inflammation persists? A thorough periodontal examination can determine whether periodontitis is the cause for the chronic gum inflammation. Any periodontitis must be treated by scaling and root planing.

Simple, fast, and efficient

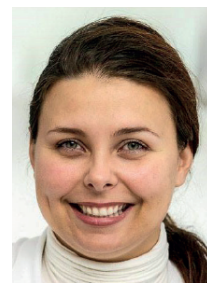
The bacteria in the oral cavity do not only stick to the hard tooth surfaces. Some bacteria have the property of penetrating the tissue and therefore, they cannot be eliminated by mechanical tools like the toothbrush.

One possibility to detect and identify periodontal pathogens is the product PerioPOC®. This is a space-saving chair-side test, which leads to results within 20 minutes.

Application

Although the test requires only a few simple steps, one should allow enough time (about 20 minutes) for it. Make sure your patient did not use any mouthwash, there was no anesthesia applied in whatever form, and no plaque staining solution was applied. The sampling sites should be left as naturally as possible to ensure correct test results.

- 1. Probing:** Where are the deepest pockets, where is the bleeding? Make sure to document your findings!
- Take a sterile **paper point** out of the packaging using sterile tweezers and insert it into the deepest pocket. Leave it in place for 30 seconds.
- Document the sampling site and put the entire paper point into the **test tube**.
- Repeat this procedure if necessary in other places.
- Add 6 drops of **solution A** into the test tube, close, and shake well for 30 seconds then put the test tube in the heating block.
- Carefully remove the tube after 6 minutes (caution hot!) and use the enclosed pipette to draw up the liquid and put one drop into the designated location on



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the **test chip**.

7. After 2 minutes, add one drop of **solution B**.
8. After another 2 minutes, add one drop of **solution C**.
9. After another 2 minutes, add one drop of **solution D**.
10. The **result** can be read after 4 minutes.

Practical tips:

- Turn on the heating block before the patient is requested to enter the treatment room to ensure that the required operating temperature of 95 °C is reached.
- I prefer a digital kitchen timer or smartphone for the countdown over an hourglass or a simple watch, because chatting to the patient may be distracting.
- Take a picture of the test chip with the result and save it together with the electronic patient file.
- 2 paper tips should be used per sample tube.

Therapy

The alpha and omega of every gingivitis and periodontitis therapy is the thorough reduction of the dental biofilm as the cause of the problem. At the same time the scaling must be minimally invasive to protect the dental enamel. A smooth surface will no longer irritate the surrounding tissue and will help the healing process.

For an optimal therapeutic result, it is also up to the patient to maintain this clean condition by practicing a conscientious home care with the individually selected aids.

If bleeding and refractory dental pockets remain despite the initial therapy and good cooperation of the patient you can use the rapid test of GENSPEED®. If the test is positive the dentist will choose an appropriate continuation of the periodontitis therapy, possibly with an adjunctive systemic antibiotics regime.

Conclusion

The test works well as a support in the periodontal therapy:

- It is fast.
- It is compact - fits in even the smallest of practices.
- The patient can see the result in the same session.
- The subsequent therapy can be started immediately.
- There is no logistical effort (packaging and mailing) involved.

Nevertheless, fighting the cause is paramount:

- conscientious home care and professional teeth cleaning
- perfect subgingival cleaning of all affected root surfaces
- smoking cessation
- good diabetes management
- strengthen the immune system
- remediation of caries and elimination of plaque retention sites (protruding or cracked fillings and/or crown margins)
- regular recall; shorten the intervals if necessary

Sources:

- http://www.oegp.at/wp-content/uploads/2017/12/OEGGP_Gesundes_Zahnfleisch_Web_Praxis.pdf
- <https://www.genspeed-biotech.com/genspeed-biotech.com/dental/1/164/>