JAN 11, 2019

Detection and quantification of Candida spp. from subgingival areas

PLOS One

Sanja Petrovic¹, Milena Radunovic¹, Ana Pucar¹

¹University of Belgrade

Sanja Petrovic

ABSTRACT

Detection and quantification of Candida spp. from subgingival areas using two methods- sterile periodontal curette and sterile paper points.

MATERIALS

MATERIALS

✕ Disposable gloves, nitrile **Contributed by users**

✕ Periodontal probe **Contributed by users Catalog #PCPNT2W**

✕ G. Hartzell & Son Model # S4L/4RHSS; Heavy Duty Columbia Curette One End # S4L One End # 4RHSS **Contributed by users Catalog #126-S4L/4RHSS**

✕ Tab Top Microcentrifuge Tube Sorenson SioScience Inc. 1.5ml **Contributed by users Catalog #16479**

✕ Sabouraud Dextrose Broth **Contributed by users Catalog #M033**

✕ Sabouraud dextrose agar **Contributed by users Catalog # MH063-100G**

✕ Candida differential agar **Contributed by users Catalog #M1297A-100G**

OPEN ACCESS

DOI:
[dx.doi.org/10.17504/protocols.io.wdefa3e](https://doi.org/10.17504/protocols.io.wdefa3e)

External link:
<https://doi.org/10.1371/journal.pone.0210527>

Protocol Citation: Sanja Petrovic, Milena Radunovic, Ana Pucar 2019. Detection and quantification of Candida spp. from subgingival areas. **protocols.io** <https://dx.doi.org/10.17504/protocols.io.wdefa3e>

MANUSCRIPT CITATION: Petrovic SM, Radunovic M, Barac M, Pfcir JK, Pavlica D, Arsenijevic VA, Pucar A (2019) Subgingival areas as potential reservoirs of different *Candida* spp in type 2 diabetes patients and healthy subjects. PLoS ONE 14(1): e0210527. doi: [10.1371/journal.pone.0210527](https://doi.org/10.1371/journal.pone.0210527)

License: This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

Created: Dec 12, 2018

Last Modified: Jan 11, 2019

PROTOCOL integer ID:
18566

- 1 1. The first day- clinical periodontal examination (full mouth examination at six sites per tooth) in order to diagnose chronic periodontitis and detect the deepest periodontal pocket (with the highest PPD value).
- 2 -Record plaque index (Silness-Löe), bleeding on probing (BOP), periodontal pocket depth (PPD) and clinical attachment loss (CAL). Samples should not be obtained the first day, to avoid contamination by blood.
- 3 2. The second day- sampling. Isolate sampling tooth with cotton rolls.
- 4 -Remove the supragingival plaque by a curette and sterile gauze.
- 5 -Place two sterile paper points (#30) into the pocket/sulcus until a mild resistance appears and keep for 30 seconds. Paper points contaminated by blood should be excluded.
- 6 -Collect paper points and place into 1mL of Sabouraud dextrose broth.
- 7 - Use sterile curette to obtain samples of the complete subgingival biofilm and inoculated in separate sterile plastic tubes containing 1 mL of Sabouraud dextrose broth.-

- 8 - Send samples to microbiologic laboratory.
- 9 3. The second day -microbiological protocols. Vortex samples for 60 seconds.
- 10 - Streak 20µl of suspended broth on SDA and ChromAgar using sterile plastic micro pipette.
- 11 -Incubate at 25°C for 48 hours
- 12 4. The fourth day. Count the number of Colony Forming Units per sample.
- 13 -Multiply the obtained number by 50 in order to obtain CFU/ml.