

Did the Covid-19 Pandemic influence the Number of Syphilis Cases?

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Introduction: Syphilis is a systemic, multi-stage disease with chronic, gradual course, caused by *Treponema pallidum*. The COVID-19 pandemic led to several lockdowns during 2020 with the instruction to avoid direct contacts. Aim of the evaluation was to compare the number of patients diagnosed with an early syphilitic infection (primary, secondary syphilis, early latent), in 2020 and 2019, the year before the pandemic.

Patients and methods: Patients, sent to the Outpatient Centre because of suspicious syphilitic infection, or contact tracing, were evaluated concerning gender, age, sexual orientation, symptoms, and contact tracing. Laboratory diagnosis was performed by darkfield microscopy of smear material of suspected chancres and condylomata lata to detect *T. pallidum* and by serology (VDRL, IgM, TPPA).

Results: There was a significant increase in early latent syphilis, with 9 patients in 2019 to 21 in 2020 (133%). The number of patients with primary and secondary Syphilis decreased from 15 to 10 (33.4%), and 9 to 3 patients (66.6%), respectively (Table 1).

Table 1. Numbers and symptoms of Syphilis patients in 2019 and 2020

	2019		2020	
	Number	symptoms	Number	symptoms
Early latent Syphilis	9	1 susp. ulcerus 1 exanthem 7 no symptoms	21	5 susp. ulcera 12 exanthema 15 no symptoms
Primary Syphilis	15	14 susp. ulcera 1 erosion	10	10 susp. ulcera
Secondary Syphilis	9	7 exanthema 2 no symptoms	3	3 exanthema
total		33		34



Fig. 1: *T. Pallidum* visualized in dark field microscopy. Darkfield microscopy was positive in 9 cases in 2019 compared to 5 cases in 2020 (all primary syphilis). Photo: Outpatient Centre Vienna

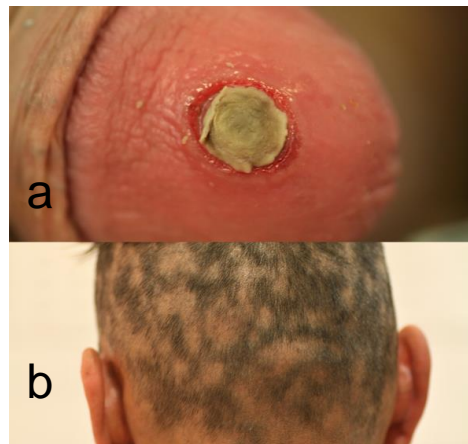


Fig. 2: Clinical signs of syphilis positive patients (a) primary chancre (b) Alopecia

Conclusion: Despite the restrictions to avoid direct contacts the total number of syphilis cases diagnosed in 2020 increased. While the pandemic might have had an influence on the number of primary and secondary syphilis, the number of early latent syphilis increased alarmingly. Contact tracing and follow up controls are of great importance to maintain best service for patients.

