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Biofilm production (BP) is being considered an important associated virulence factor of *Candida* spp. However, there is lack of information regarding the differences in BP between different *Candida* species and clinical samples.

Objectives. Our objective was to assess BP among the most important *Candida* species and among different clinical samples and to classify them as low, moderate or high biofilm-forming isolates.

Methods. We retrospectively performed an in vitro model of BP in 96-well microtiter plates including 200 strains of *Candida* spp. isolated from different clinical samples (Table). BP was assessed using the crystal violet binding assay. The cut-offs used to define low, moderate, and high biofilm-forming isolates were <1, 1-2, and >2, respectively.

Results. Most *C. albicans* were moderate or high biofilm-producers, whereas *C. parapsilosis* were low or moderate. The highest BP values were found in *C. tropicalis* and, in contrast, the lowest BP values were detected in *C. guilliermondii*. According to the *Candida* BP by origin of the isolation, we found that urine and respiratory tract samples were associated to low biofilm-producing *Candida* spp., whereas sterile liquids, biopses, and catheter samples were associated to high biofilm-producing *Candida* spp.(Table).

Conclusion. BP in *Candida* varies with different *Candida* species being higher with *C. tropicalis*. In addition, different clinical samples are associated with different degrees of BP.

Specie (N, %)	Biofilm production Mean (SD)	Biofilm production N (%)		
		Low BP, <1	moderate BP, 1-2	high BP, >2 p
<i>C. albicans</i> (41, 20.5)	1.8 (0.5)	3 (7.3)	19 (46.3)	19 (46.3) <0.001
<i>C. parapsilosis</i> (40, 20.0)	1.3 (0.9)	15 (37.5)	14 (35.0)	11 (27.5)
<i>C. krusei</i> (40, 20.0)	0.4 (0.3)	37 (92.5)	3 (7.5)	0 (0.0)
<i>C. glabrata</i> (39, 19.5)	0.3 (0.4)	36 (92.3)	3 (7.7)	0 (0.0)
<i>C. tropicalis</i> (22, 11.0)	2.4 (0.7)	1 (4.5)	5 (22.7)	16 (72.7)
<i>C. guilliermondii</i> (18, 9.0)	0.6 (0.5)	14 (77.8)	4 (22.2)	0 (0.0)
Clinical sample				
Urine (33, 16.5)	0.8 (0.7)	21 (63.3)	9 (27.3)	3 (9.1)
Biopsy (28, 14.0)	1.5 (0.8)	8 (28.6)	10 (35.7)	10 (35.7)
Low respiratory tract (26, 13.0)	0.4 (0.4)	24 (92.3)	1 (3.8)	1 (3.8)
Blood (24, 12.0)	1.4 (0.9)	8 (33.3)	8 (33.3)	8 (33.3)
Sterile liquids (18, 9.0)	1.6 (1.1)	6 (33.3)	4 (22.2)	8 (44.4)
Wound (13, 6.5)	0.9 (0.8)	9 (69.2)	3 (23.1)	1 (7.7)
Abscess (10, 5.0)	1.3 (1.0)	5 (50.0)	2 (20.0)	3 (30.0)
Catheter (8, 4.0)	1.7 (0.6)	2 (25.0)	2 (25.0)	4 (50.0)
Prosthetic material (3, 1.5)	1.8 (0.8)	0 (0.0)	2 (66.7)	1 (33.3)
Others (37, 18.5)	0.9 (0.8)	23 (62.2)	7 (18.9)	7 (18.9)