

R1 R2 R3 PG0 PG1 Estagiário Tecnólogo PIBIC

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Correlation of the results between direct exam and culture for bacteria, fungus, amoeba in conjunctivitis, keratitis and endophthalmitis.

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Purpose: To analyze agreement of the results obtained by direct exam and culture of samples from conjunctivitis, keratitis and endophthalmitis.

Methods: Retrospective study of the results of the direct exam by Gram and Giemsa staining and culture of the materials from the cornea, conjunctiva and intraocular fluids. Agreement analysis was made through Kappa and McNemar tests, and considered significant if $p < .05$.

Results: There was agreement between direct exams and culture in bacterial conjunctivitis and keratitis, and in fungal and amoebal keratitis. In aqueous humour samples from bacterial endophthalmitis (Kappa=. 38 $p < .0001$) and vitreous samples from fungal endophthalmitis (Kappa-.32 $p < .0001$) borderline agreement was observed. Among the significant disagreements found between amoebal ($p < .0022$) and bacterial ($p < .0173$) keratitis, there was a higher positivity in the culture. Among the significant disagreements found between aqueous humour and vitreous in bacterial ($p < .0001$) and fungal ($p < .0013$) endophthalmitis, there was a higher positivity in the direct exam.

Conclusion: Even though we had reduced sample volumes, the screening procedures for microorganism detection in the cornea and conjunctiva were adequate. In intraocular infections we observed higher direct exam positivity. Therefore, diagnostic evaluation method modification in intraocular infections is an important issue, as cultures should yield more positive results.