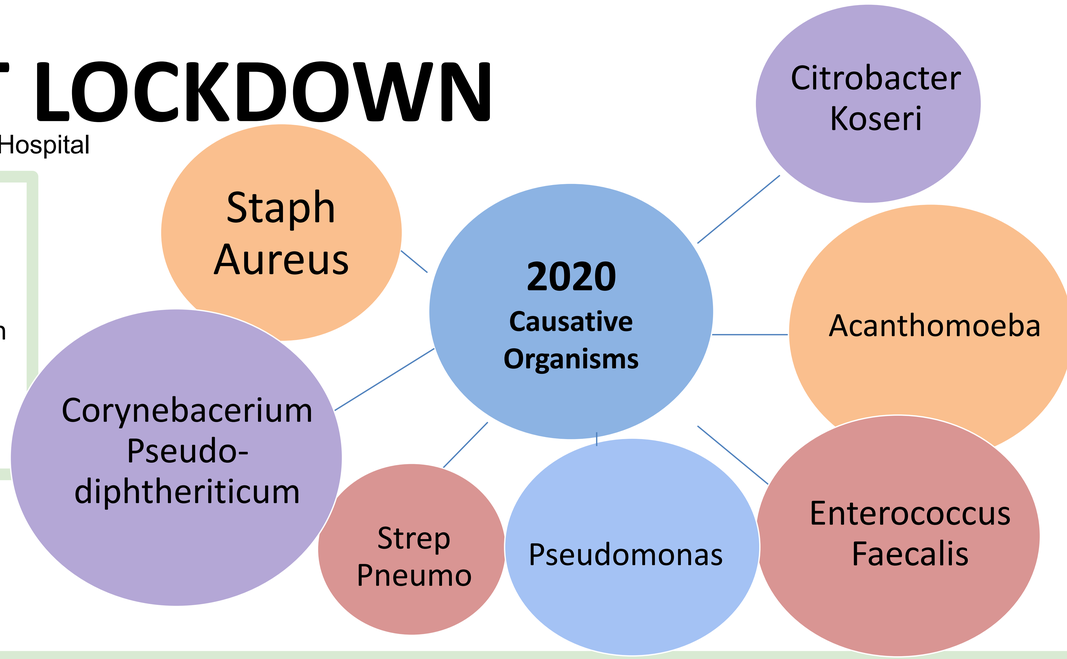
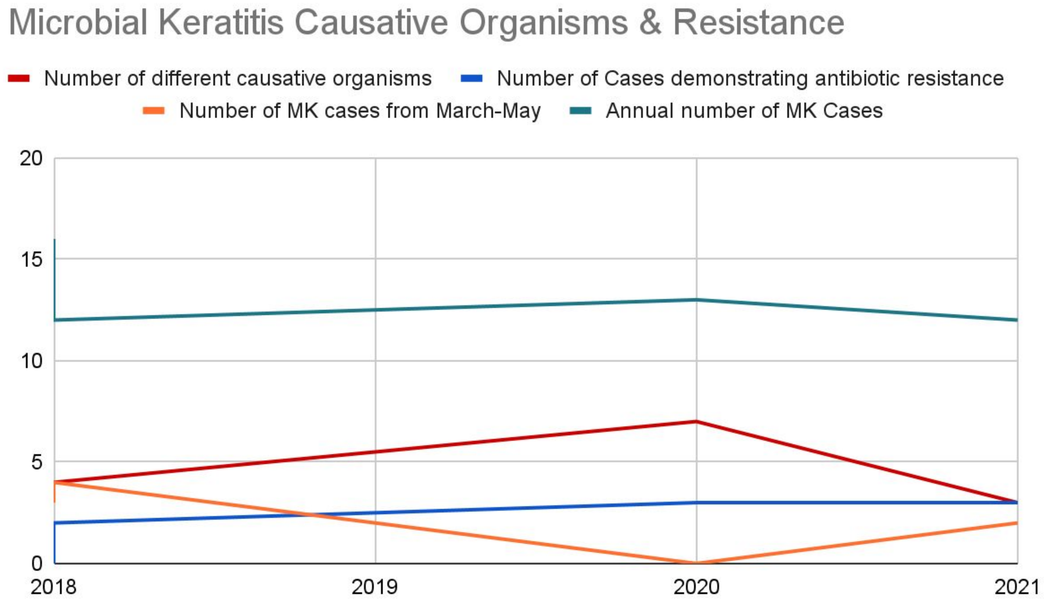
MICROBIAL KERATITIS PATHOGENICITY AND ANTIBIOTIC RESISTANCE PRE AND POST LOCKDOWN

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OBJECTIVES: To identify the incidence and pathogenicity of microbial keratitis prior to, during and following the COVID-19 lockdown and to highlight any changes in microbial sensitivity and resistance patterns across this time period that may influence future practice and management of this condition.

METHODS: Retrospective analysis from 2018 to 2021 of corneal scrapings taken from cases of microbial keratitis at Ipswich Hospital was done. Comparison of the number of cases as well as specific organisms cultured from corneal scrapings was done through review of clinical notes and microbiology reports.





RESULTS: A fourfold reduction in microbial keratitis incidence was noted during the national lockdown from March to May 2020 compared with the previous year, however the overall number of annual presentations remained constant. Following the lockdown period, a 133% increase in the number of different pathogenic organisms cultured from corneal scrapings was noted. This returned to pre-lockdown levels over the course of the following year. A fifty percent increase in the incidence of resistant organisms was also noted over the four years investigated.

CONCLUSION: The increased number of microorganisms cultured following the lockdown period may have been the result of delayed presentations and timely medical treatment. This finding highlights the importance of ensuring patients are made aware of early warning signs of and that healthcare practitioners maintain a low threshold for referring patients with suspected microbial keratitis in order to avoid increases in pathogenic organisms over time, which may ultimately potentiate future cases of antimicrobial resistance.