

Potential shortage of hydroxychloroquine

This alert provides information regarding the potential national shortage of hydroxychloroquine, and provides guidance from the SA expert Advisory Group on Antimicrobial Resistance (SAAGAR) on the appropriate place of hydroxychloroquine in clinical practice.

Hydroxychloroquine is a disease-modifying anti-rheumatic drug (DMARD) used for the treatment of rheumatoid arthritis and other inflammatory conditions such as systemic lupus erythematosus (SLE).¹ Historically it was used to treat malaria, however its use has declined since the emergence of *Plasmodium* resistance to chloroquine and hydroxychloroquine.²

Summary of issues

- > There is potentially a critical global shortage of hydroxychloroquine imminent due to recent media attention on its possible role in the treatment of SARS-CoV-2 infection (COVID-19). Inappropriate use of hydroxychloroquine is **increasing the risk that it will be unavailable to treat patients with a proven need for the drug.**
- > The currently available evidence for hydroxychloroquine in COVID-19 is limited to *in vitro* data suggesting antiviral activity against SARS-CoV-2.³ in addition to a small single arm open label study.⁴ A small prospective randomised study found no benefit with hydroxychloroquine compared to standard supportive care.⁵
- > There are currently no adequately powered, published randomised trials to determine the efficacy and safety of hydroxychloroquine for the treatment of COVID-19. There is no evidence that prophylaxis with hydroxychloroquine reduces the risk of infection with SARS-CoV-2.

Risk of toxicity with hydroxychloroquine

- > Gastrointestinal adverse effects are common with hydroxychloroquine. In addition, hydroxychloroquine may cause ocular toxicity, including blurred vision, keratopathy and retinopathy. Rarely, it is associated with cardiomyopathy, resulting in heart failure. Hydroxychloroquine may prolong the QT interval, and cause arrhythmias including torsade de pointes, particularly if given with other medications that also prolong the QT interval, such as azithromycin.⁵

The role of hydroxychloroquine in the treatment of COVID-19

- > Hydroxychloroquine should be reserved for **hospitalised patients with COVID-19 and only be prescribed under the guidance of ID/microbiology specialist advice, or as part of a clinical trial** with or without concomitant antiviral drugs.
- > For prophylaxis or treatment of mild COVID-19, there is no evidence that the possible benefits outweigh the risk of serious adverse effects to hydroxychloroquine.

References:

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