March 24, 2020

COM-2020-019

Dear provider of pharmaceutical services,

Today we are facing the COVID-19 pandemic caused by a novel coronavirus named SARS-CoV-2 without FDA-approved drugs or vaccines to treat or prevent this condition. Recently, the demand for Hydroxychloroquine sulfate (Plaquenil™) has been increasing causing an unnecessary drug shortage at the pharmacy level affecting treatment access to patients already on this drug. This medicine has been associated with serious adverse effects, which is also of concern in terms of patient safety. Hydroxychloroquine is currently under investigation in clinical trials for pre-exposure or post-exposure prophylaxis of SARS-CoV-2 infection, and treatment of patients with mild, moderate, and severe COVID-19 in the United States due to its immunomodulatory effects.[(1)] Additional information on hydroxychloroquine clinical trials is available at https://clinicaltrials.gov/. The potential benefit of hydroxychloroquine use in COVID-19 has been based on observational series or anecdotal reports and used for a short duration of less than a week. Gautret et al. (2020) in an open-label study (N=36 hospitalized patients) use hydroxychloroquine 200mg TID for 10 days plus azithromycin 500mg day-1 then, 250mg daily. This combination reduced the duration of the virus in patients (70% vs – 12.5%). [(2)]

There are no currently available data from Randomized Clinical Trials (RCTs) to inform clinical guidance on the use, dosing, or duration of hydroxychloroquine for prophylaxis or treatment of SARS-CoV-2 infection. Different hydroxychloroquine dosing regimens have been reported such as 400mg BID on day one, then daily for 5 days; 400 mg BID on day one, then 200mg BID for 4 days; 600 mg BID on day one, then 400mg daily on days 2-5.[(3)] Now more than ever, pharmacists, who are the first line of defense in protecting our patients, are in the best position to provide the correct information and implement initiatives to address these issues regarding access and safety.

CLINICAL INFORMATION: [(4,5)]

FDA Approved indication	Dosing	Adverse effects	Monitoring & Precautions	Patient counseling
Adult: Lupus Erythematosus, Rheumatoid Arthritis, Malaria **Pediatric:** Malaria	• Lupus Erythematosus: 200mg-400mg/D or BID • Rheumatoid Arthritis: Initial-400mg-600mg D or BID, Cont. 200mg-400mg D or BID • Malaria Prophylaxis**:** 400 mg orally once weekly on the same day each week beginning 2 weeks prior to travel to malarious area, continue each week while in area and for 4 weeks after leaving area. Treatment: Initial, 800 mg orally for 1 dose followed by 400 mg at 6, 24, and 48 hours after the initial dose ***Do not exceed 600 mg or 6.5 mg/kg/D***	Serious: • **Cardiovascular**: QT prolongation Torsades de pointes • **Endocrine Metabolic:** Hypoglycemia (Severe) • H**ematologic:** Agranulocytosis, Aplastic anemia, Thrombocytopenia • **Musculoskeletal:** Disorder of muscle (myopathy or neuromyopathy • **Ophthalmic:** Retinal disorder-Irreversible retinopathy (7.5%) • **Otic:** Hearing loss • **Other:** Angioedema, suicidal behavior	• Ophthalmologic examinations (baseline then annually) • Renal function (elderly) • CBC • Clinical signs and symptoms of cardiomyopathy, including use of appropriate diagnostic tools such as (ECG) • Use with caution in patients with Hepatic / Renal Disease	Take with a meal or a glass of milk.

RECOMMENDATIONS FOR PHARMACISTS:

- Make sure that your patients currently in this therapy have access to their refills (e.g. generate drug reports)
- Call patients for prescription pick up or provide home delivery services
- Monitor drug-drug interactions (*e.g. Concurrent use of HYDROXYCHLOROQUINE SULFATE and AZITHROMYCIN may result in an increased risk of QT-interval prolongation: Severity - Major)* and patients' conditions that could potentiate hydroxychloroquine adverse events *(e.g. diabetes, renal or hepatic diseases)*
- Review the medical literature frequently to assure that your recommendations are consistent with the most updated information

In PharmPix we are committed to the health and wellness of our insured. It is our priority to offer high - quality services and to promote practices for health promotion and disease prevention. If you have any doubts or wish to have more information regarding this document, you can call us at 787-522-5252, extension 137.

Regards,

PharmPix Clinical Department

References:

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