SUPPLEMENTAL DOC

| Drug | Randomised control trials | Key features | | |
|------------------------------------|---------------------------|--|--|--|
| Hydroxychloroquine/ Chloroquine | Chenj LD et al., [1] | Moderate COVID 19 cases; 5 days HCQ 400 mg vs. conventional treatment; negative throat swabs in 86.7% HCQ group vs. 93.3% control group on day 7, median duration from hospitalisation to nucleic acid negativity was 4 days in HCQ group vs. 2 days in control group (comparable), body temperature normalisation was also comparable in both groups; HCQ did not show benefits over control group. | | |
| | Chen Z et al., [2] | 5 days 400 mg HQ vs. standard treatment; Body temperature normalisation was lesser in HCQ group (0.4 days) vs. 1.3 days in control group, cough remission time was lesser in HCQ group, 80.6% patients showed pneumonia improvement in HCQ group on day 6 vs. 54.8% in control group; HCQ reduced risk of progression to severe disease. | | |
| | Huang M et al., [3] | 500 mg twice a day for 10 days chloroquine vs. 400/100 mg lopinavir/ritonavir twice a day for 10 days; At day 9, 60% in CQ group showed lung clearance vs 25% in lopinavir/ritonavir group, at day 14 CQ grouped more than double lung improvement on CT scans, at day 14, 100% of CQ patients were discharged vs. 50% in lopinavir/ritonavir group; Chloroquine may be an effective therapy. | | |
| | Borda MGS et al., [4] | High dose CQ (600 mg twice a day for 10 days) vs. low dose CQ (450 mg twice daily on first day then 450 mg once daily for four days); Higher QT prolongation in higher dose CQ arm (25%), higher lethality in higher dose CQ arm (17%); higher dose CQ should not be used. | | |
| | Tang W et al., [5] | HCQ vs. standard of care; at 28 days negative conversion rate was 85.3% in HCQ arm vs. 81.3% in control arm; HCQ administration did not show higher negative conversion in mild to moderate cases. | | |
| Remdesivir | Beigel JH et al., [6] | Remdesivir (200 mg on day 1 and 100 mg daily from day 2-10) vs. placebo; time to recover was 11 days in remdesivir arm vs. 15 days in placebo arm, mortality was lower in remdesivir group but was not significant; Preliminary results showed that remdesivir was superior to placebo. | | |
| | Wang M et al., [7] | Remdesivir (200 mg on day 1 then 100 mg daily from days 2-10) vs. placebo; remdesivir was not associated with difference in time to clinical improvement, difference were non-significant; Remdesivir was not associated with statiscally significant benefits. | | |
| Lopinavir/Ritonavir | Li Y et al., [8] | Lopinavir/ritonavir vs. arbidol vs. control group; median days for negativity was 8.5 in lopinavir/ritonavir, 7 in arbidol and 4 in control group, no significant differences in other end points. | | |
| | Huang M et al., [3] | Same as above. | | |
| | Cao B et al., [9] | Lopinavir/ritonavir vs. standard of care; Both showed median 16 days for time to clinical improvement, at day 28 19.2 vs. 25% mortality, clinical improvement 78.8% vs. 70%; Researchers concluded that no benefits were observed. | | |

[Table/Fig-1]: Summary of published RCTs for Hydroxychloroquine, Chloroquine, Remdesivir and Lopinavir/Ritonavir [1-9].

| | INDIA [10] | CHINA [11,12] | WHO [13,14] | CDC/NIH [15] | | |
|---|---|---|---|---|--|--|
| Home care and treatment for contacts | Asymptomatic (between day 5 and 14 post contact) and symptomatic contacts are to be tested. Recommends home quarantine with strict social distancing measures [16,17]. A contact has been defined as a person in association with an infected person or with a contaminated environment. Elaborate guidelines for identifying contacts, recommendation for home quarantine, environmental sanitation and associated measures has been provided by the government. | Contacts have been divided into close and general contacts. For close contacts (exposure from 2 days before symptoms in confirmed/suspect or 2 days before sample is taken in asymptomatic), hospital admission is preferred but home isolation may be used that is more feasible. General contacts (have had contact with suspects, confirmed cases or asymptomatic infected persons but don't meet close contact criteria) are given advice and have to report to a medical facility if they see any symptoms [18]. | Recommends admission to health care facility for all patients that have been diagnosed but if not possible, then mild cases with no risk factors may be isolated in non-traditional facilities or at home. Guidelines to be followed in case of home care have been provided. Contacts (exposure from patient 2 days before and 14 days after presentation of symptoms) are advised to monitor any symptoms till 14 days post contact. Guidance for contacts has been provided. | Specific guidelines for known and unknown contacts have been given. Known contacts are advised to stay at home for 14 days and watch themselves for symptoms [19]. | | |
| Division based on disease severity in health care facility | Mild and very mild-fever and/ or URTI Moderate-Pneumonia with no signs of severe disease Severe-Severe pneumonia or ARDS or Septic shock Management has been divided into early supportive care and monitoring. Also, guidance for management of hypoxemic respiratory failure, ARDS, septic shock and complications has been provided elaborately. Finally, recommendations for use of therapeutics have been given [20]. | Mild-Mild clinical symptoms with no signs of pneumonia on chest imaging Moderate-Fever, respiratory symptoms and signs of pneumonia on radiology Severe-Separate criteria for adults and children based on respiratory rate, O ₂ saturation etc. Critically Severe-respiratory failure/ Shock/Other organ failure needing ICU Treatment guidelines have been provided covering place of treatment, general support and support for various organ systems. Also, recommendations have been made for usage of specific drugs and discharge criteria have been provided. | Mild-Mild symptoms like uncomplicated Upper Respiratory Tract Infections (URTI), malaise, muscle aches etc., Moderate with no risk factors and Moderate with nisk factors-requires inpatient care (risk factors include advanced age, hypertension, diabetes, CVD, chronic respiratory disease, immunocompromises states) Severe-requiring oxygen therapy and other interventions Critical-requiring mechanical ventilation [21] Detailed guidance has been provided for management of various manifestations of the disease. | Mild to moderate-absence of pneumonia and hypoxia Severe-have complications like pneumonia, ARDS, shock etc., Extensive recommendations have been provided by the Infectious disease Society of America [22]. | | |
| Recommended therapeutics | Hydroxychloroquine with azithromycin for off label use. Convalescent serum as a part of trials. Glucocorticoids may be used in severe cases in low doses. | Alpha-interferon, lopinavir/ritonavir, ribavirin, chloroquine and arbidol can be tried as per guidelines. Tocilizumab may be used for patients with extensive lung lesions and elevated IL-6. Glucocorticoids may be used in severe cases in low doses. | WHO states that "There is no current evidence to recommend any specific anti-COVID 19 treatment for patients with confirmed COVID 19" | CDC mentions that "There are no drugs or other therapeutics approved by the US Food and Drug Administration to prevent or treat COVID 19." Patients can enrol for trials for remdesivir (expanded access program also available) or hydroxychloroquine/chloroquine. | | |
| [Table/Fig-2]: Comparison and review of guidelines given by the Indian and Chinese national governments against the ones given by the WHO and CDC to manage COVID 19 [10-22]. | | | | | | |

URTI: Upper respiratory tract infection; ARDS: Acute respiratory distress syndrome; CVD: Cardiovascuar disease

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