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National Guidelines on Management of Coronavirus Disease COVID-19 in Morocco

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ABSTRACT

The new COVID-19 caused by SARS-CoV-2, is a major public health problem. Morocco as other countries worldwide has established strict national guidelines on the management of this pandemic.

The aim of this study is to focus on the Protocol for the management of patients with COVID-19 and their contacts in Morocco.

All healthcare facilities can take steps to prepare for this pandemic and protect both their patients and staff.

Keywords: Coronavirus disease, pandemic disease, national guidelines, Morocco

INTRODUCTION

Coronavirus disease-2019 (COVID- 19) pandemic declared by the World Health Organization (WHO) on 11th March 2020, caused by SARS CoV 2 virus is a major public health problem in the world. This coronavirus put the scientific authority in permanent research [1,2]. WHO considers covid 19 as highly infectious and urges every nation to take it most seriously [3].

To handle the pandemic, the strategy used for many countries is containment, delay the peak of the epidemic curve by diagnosis & treatment, and mitigation through various processes.

Morocco has already started the mitigation process with specific guidelines [4].

First, the criteria for defining a case of SARS-COV-2 (COVID 19) infections was established [4].

Suspect case: Is considered "possible case of COVID-19", a person with an acute respiratory illness having been in contact, with a confirmed COVID-19 case, 2 or 3 days before, and while covid-19 case was symptomatic. A suspect case is also, any person with a severe acute respiratory illness, in the absence of an alternative diagnosis that fully explains the clinical presentation. Or, all clustered cases with a severe acute respiratory illness involving more than two people

living or working under the same roof, or having shared an activity requiring their unprotected presence, less than one meter and for more than four hours.

Confirmed case: A person with laboratory confirmation of virus causing COVID-19 infection either by a molecular technique of diagnosis (RT PCR or similar method) or the rapid test, which detects the viral antigen. In addition, Any possible cases with very suspect radiological and Clinical symptoms and the detection of anti-SARS-COV-2 antibodies (Immunoglobulin M (IgM)) by serological rapid test.

CONTACT MANAGEMENT OF CONFIRMED CASES

After the detection of a potential case, the contacts are all identified and categorized by the level of the risk for exposure. All contacts should all be confined for a period covering 14 days, independently of the risk levels, in appropriate structures under the authority's supervision. A PCR test or rapid antigen test must be carried out on the 4th day, from the last contact. The treatment of symptomatic contacts must be started even before the laboratory result (according to the logic of the possible Case).

The asymptomatic contacts will be screened on the 4th day of confinement; however, treatment will be initiated in the following two situations:

- 5-day prophylactic treatment for high-risk contacts;
- 10-day curative treatment for contacts with comorbidity: age over 65, high blood pressure, complicated diabetes, morbid obesity, organ failure and cancer (after eliminating the contraindications and respecting the rules of use)

The asymptomatic contacts, of moderate or low risk and without comorbidity, of which the test result of the 4th day was negative must remain in confinement with sanitary surveillance and respect of the measures barriers and hygiene rules of use.

DIAGNOSIS

The Technical and scientific consultative Committee of the National Programme for the prevention and the control of Influenza and acute Respiratory infections considers a positive COVID 19 as any person in which the infection was confirmed by a molecular technique of diagnostic (RT PCR or similar method) or by the rapid test, which detects the viral antigen, or any possible cases with a very suspect radiological and Clinical symptoms and the detection of anti-SARS-COV-2 antibodies (Immunoglobulin M (IgM)) by serological rapid test.

For patients with progressive deterioration of oxygenation indicators (Polypnea ; Respiratory rate $>$ or equal to 30 cycles per min, oxygen saturation $<92\%$ under 4 liters per minute of oxygen), systolic blood pressure <90 mmHg or heart rate > 120 beats / min; must be transferred immediately to the intensive care unit.

SPECIFIC THERAPIES

There is no antiviral treatment recommended for COVID-19, and no vaccine is at present made available. On March 22, 2020, the basis of recommendations made by the Scientific and technical consultative committee of the national Program for the prevention and Control of influenza and other acute Respiratory Infections, the Ministry of Health has adopted the therapeutic protocol based on Chloroquine and hydroxychloroquine. Some approaches have been suggested, such as chloroquine (500 mg every 12 hours) or hydroxychloroquine sulfate (200 mg every 8 hours) for a period of 10 days, in association to azithromycin 500 mg on D 1, followed with 250 milligrams per day from D 2 to D 7. In the absence of clinical improvement and/or PCR negativity, the first-line treatment may be prolonged for a further 5 more days, before a switch to second line treatment is envisaged. The association Lopinavir/Ritonavir at a dosage of 400mgx 2 per day during 10 days also used as a second-generation therapy. Moreover, the use of antibiotics is not systematic and is only recommended for subsequent bacterial Superinfection. For bed-ridden patients at high risk of thromboembolic complications, it may be important to associate Low-molecular-weight heparin (LMWH). The management of the patient is conducted in a Hospital Center, with strict surveillance (clinical, Biological and also radiological) of the health of this patient to detect any signs of deterioration at an early stage.

In the presence of a radio-clinical and biological Panel very suggestive of COVID 19, the treatment must start immediately, then take a sample for Virological Confirmation. Prophylactic treatments are hydroxychloroquine sulfate (400 mg every 12 hours) on D1, followed with 200 mg every 12 hours per day from D2 to D5. All patients treated with first and second intention treatments are actively monitoring the adverse drug effects in accordance with the pharmacovigilance standards.

VIROLOGICAL AND SEROLOGICAL MONITORING – RECOVERY CRITERIA

The recovery can be evoked only after 10 days of therapy, with clinical improvements for at least 3 days and no radiological and other biological deterioration.

After leaving the Hospital, Patients should be moved into a Buffer structure for a period of 14 days, during which there should be continued careful observance of specific barrier measures and personal hygiene rules. The direct passage from the hospital to the home may be considered if the conditions of isolation are judged favorable.

CRITERIA FOR RECOVERY

Any possible or confirmed case is declared cured at the end of the treatment period, with:

- Improvement of the clinical picture;
- And apyrexia for 3 consecutive days;

And:

- 2 negative PCR or GenXpert tests, at d9 and d 10; or
- 2 negative PCR or GenXpert tests, at d14 and d15; or
- Seroconversion (absence of IgM and increase in IgG) observed on the 15th day of hospitalization, or at the end of the 14 days of confinement following discharge from hospital'.

DECLARATION OF CONFLICT OF INTEREST

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