



Physician connect

Vol 1 | Issue 7 | 2020

Dear Doctor,

Greetings from Micro Labs Limited. We are happy to bring you '**Physician connect**' which contains latest and interesting news in the field of Medicine.

This issue contains

- A Retrospective Observational Study on Clinical Features of 85 Fatal Cases of COVID-19 from Wuhan
- Low-Dose Colchicine in the management of Myocardial Infarction
- Association of Home Blood Pressure Monitoring and Health Literacy in Hypertension Management

Should you require any specific article or medical information, please feel free to contact us at

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Looking forward to your valuable feedback

Best Regards,

Medical Team, Micro Labs Limited

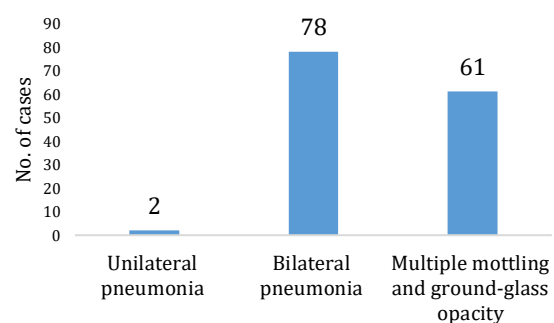
A Retrospective Observational Study on Clinical Features of 85 Fatal Cases of COVID-19 from Wuhan

COVID-19 pandemic has caused a significant health burden globally. This study reports the clinical features of few of the fatal cases with COVID-19 in two hospitals in Wuhan. The Medical records of 85 fatal cases of COVID-19 between January 9 and February 15, 2020 were collected. Information recorded included medical history, exposure history, comorbidities, symptoms, laboratory findings, CT scans and clinical management.

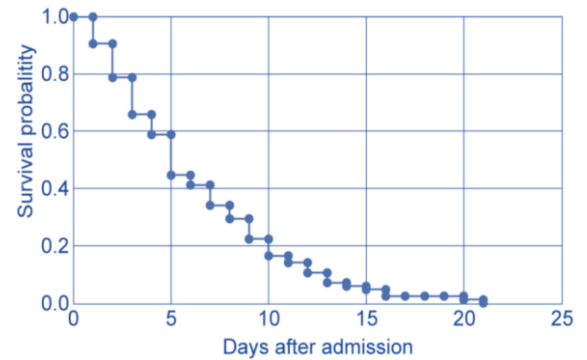
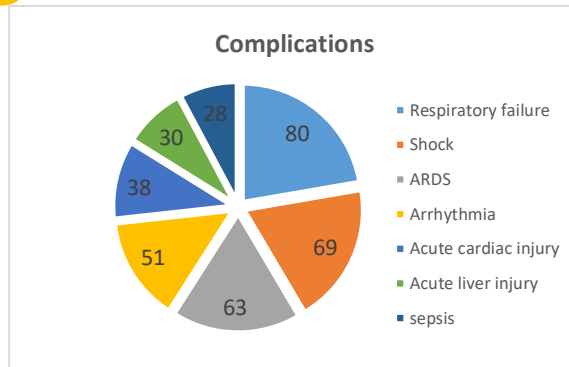
Early onset of shortness of breath may be used as an observational symptom for COVID-19 exacerbations. Eosinophilopenia may indicate a poor prognosis. There were no considerable benefits with the combination of anti-microbial drugs.

The median age of the patients was 65.8 years and 72.9% were male. Common symptoms were fever (78 [91.8%]), shortness of breath (50 [58.8%]), fatigue (50 [58.8%]), dyspnea (60 [70.6%]). Hypertension, diabetes and coronary heart disease were the most common comorbidities. Notably, 81.2% patients had very low eosinophil counts at admission. Complications included respiratory failure (80 [94.1%]), shock (69 [81.2%]), ARDS (63 [74.1%]), arrhythmia (51 [60%]), etc. Most patients received antibiotic (77 [90.6%]), antiviral (78 [91.8%]) and glucocorticoids (65 [76.5%]) treatments. 38 patients [44.7%] and 33 [38.8%] received intravenous immunoglobulin and interferon α 2b respectively.

Chest CT findings of patients with COVID-19



In this depictive study of 85 fatal cases of COVID-19, most cases were male aged over 50 years old with noncommunicable chronic diseases. The majority of the patients died of multiple organ failure. Early onset of shortness of breath may be used as an observational symptom for COVID-19 exacerbations. Eosinophilopenia may indicate a poor prognosis. The combination of anti-microbial drugs did not offer considerable benefit to the outcome of this group of patients.



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Source: Du Y, et al. Am J Respir Crit Care Med. 2020;10.1164/rccm.202003-05430C.

Low-Dose Colchicine in the management of Myocardial Infarction

Experimental and clinical evidence supports the role of inflammation in atherosclerosis and its complications. Colchicine is an orally administered, potent anti-inflammatory medication that is indicated for the treatment of gout and pericarditis.

This was a randomized, double-blind trial involving patients recruited within 30 days

after a myocardial infarction. The patients were randomly assigned to receive either low-dose colchicine (0.5 mg once daily) or placebo. The primary efficacy end point was a composite of death from cardiovascular causes, resuscitated cardiac arrest, myocardial infarction, stroke, or urgent hospitalization for angina leading to coronary revascularization. The components of the primary end point and safety were also assessed.

Colchicine lowers risk of ischemic cardiovascular events

A total of 4745 patients were enrolled; 2366 patients were assigned to the colchicine group, and 2379 to the placebo group. Patients were followed for a median of 22.6 months. The primary end point occurred in 5.5% of the patients in

the colchicine group, as compared with 7.1% of those in the placebo group (hazard ratio, 0.77; 95% confidence interval [CI], 0.61 to 0.96; $P = 0.02$). The hazard ratios were 0.84 (95% CI, 0.46 to 1.52) for death from cardiovascular causes, 0.83 (95% CI, 0.25 to 2.73) for resuscitated cardiac arrest, 0.91 (95% CI, 0.68 to 1.21) for myocardial infarction, 0.26 (95% CI, 0.10 to 0.70) for stroke, and 0.50 (95% CI, 0.31 to 0.81) for urgent hospitalization for angina leading to

coronary revascularization. Diarrhea was reported in 9.7% of the patients in the colchicine group and in 8.9% of those in the placebo group ($P = 0.35$). Pneumonia

was reported as a serious adverse event in 0.9% of the patients in the colchicine group and in 0.4% of those in the placebo group ($P = 0.03$).

Among patients with a recent myocardial infarction, colchicine at a dose of 0.5 mg daily led to a significantly lower risk of ischemic cardiovascular events than placebo

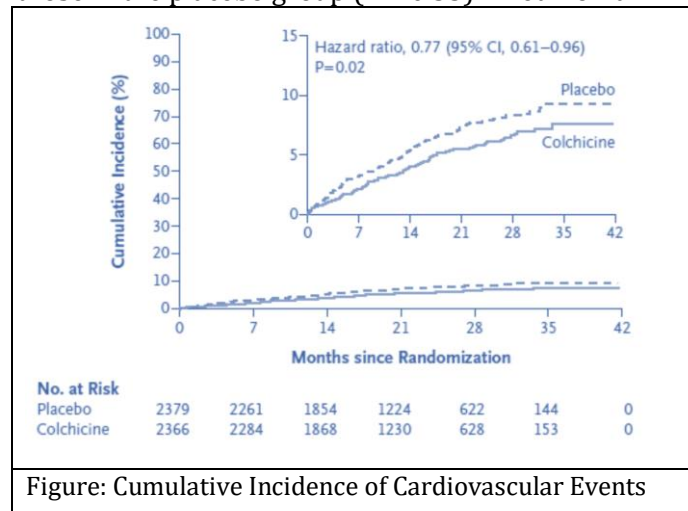


Figure: Cumulative Incidence of Cardiovascular Events

Source: Tardif JC et al. N Engl J Med. 2020;381(26):2497–2505.

Association of Home Blood Pressure Monitoring and Health Literacy in Hypertension Management

Several International Guidelines recommend home blood pressure monitoring (HBPM) an essential monitoring option especially for patients with a suspected white coat effect or masked hypertension.

This study aimed to find out the association between patient health literacy (including educational level and other related socioeconomic factors) and

HBPM, which may or may not lead to improvement of BP control. the finding will be particularly useful to the low-income hypertensive populations.

Patients' educational level and literacy were not the limiting factors to usage of Home BP monitoring

A systematic search and selection of relevant studies from 195 studies were identified from MEDLINE, EMBASE, and PubMed. Bibliographies of primary studies and review articles meeting the inclusion criteria were searched manually to identify 15 further eligible studies. Finally, 48 studies (19 randomized controlled trials and 29 cross-sectional studies) were included in the data synthesis. The included studies were performed in North America, Europe, and Asia from 2003 to 2019.

There were various types of home BP monitors involved in selected studies. They included automatic electronic branchial devices, electronic semi-automated branchial devices, manual mercurial sphygmomanometer, and electronic wrist devices. The possession of home BP monitors was related to higher educational level and/or income status, while the frequency of HBPM as clinician recommended was not necessarily related to the educational level. Patients performed higher quality of HBPM if they received HBPM instructions from pharmacists or doctors than if they received them from nonprofessionals. The overall possession and compliance to HBPM were suboptimal. It was found that after structured training, social disadvantaged patients could have significant improvement in HL, self-efficacy, and BP control. A structured intervention for identifying patients with low HL and offering training of hypertension self-care including HBPM, with the effect of improving BP control and increasing patients' HL. In view of the fact that less than 40% of the hypertensive patients had optimal BP control in different populations, the promotion of high-quality HBPM in patients with uncontrolled hypertension should be a clinical priority.

Source: Intl J Hypertens. 2020 March. ID 7502468: 1-15
<https://doi.org/10.1155/2020/7502468>



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