RECOVERY
Randomised Evaluation of COVID-19 Therapy

Intervention

Aspirin 150mg once daily until discharge.

In the RECOVERY Trial we are testing aspirin, a commonly used antiplatelet drug that may be beneficial in COVID-19.

Summary of information on aspirin in COVID-19

COVID-19 is often accompanied by systemic inflammation and activation of the coagulation system, including platelets[1-3]. This may explain the apparent increase in venous and arterial thrombosis observed with infection, and the widespread platelet-rich microthrombi found in autopsy series[4-6]. It has been proposed that platelet activation in response to inflammation and endothelial injury is important in COVID-19 pathogenesis, and that this could be mitigated by antiplatelet therapy[7].

Aspirin is one of the most widely used drugs worldwide, with a well-established safety profile. In hospitalised patients with COVID-19, the use of aspirin has been associated with reductions in mortality and the need for ventilation, but this has not been evaluated in randomised controlled trials[8].

Potential harm

Aspirin, like other antiplatelet drugs, increases the risk of bleeding, so should be used with caution in patients with a high risk of bleeding. It also increases the risk of peptic ulceration.

Frequently asked questions

1. Can someone already taking aspirin, or another antiplatelet agent such as clopidogrel, be entered into the aspirin randomisation in RECOVERY?

No, but they could still be entered into randomisations in RECOVERY that involve other treatments.

2. Can someone taking other non-steroidal anti-inflammatory drugs (NSAIDs) be entered into the aspirin randomisation in RECOVERY?

Yes, if the managing doctor does not think that co-administration of aspirin would be contraindicated.

3. What are the contraindications to aspirin?

These are the same as for other indications, in particular:

- Age <18 years old
- Known hypersensitivity to aspirin
- Recent major bleeding that precludes use of aspirin in opinion of the managing doctor

4. Can non-oral routes be used?

Yes, aspirin can be given via nasogastric tube or per rectum at the same dose. Intravenous formulations are rarely available and should not be used.

5. Should patients receiving aspirin also be given a gastroprotective drug, such as a proton-pump inhibitor?
The use of gastroprotective drugs is left to the patient's managing doctor.

6. Should patients continue to receive standard thromboprophylaxis?
Yes. For most patients this would include low molecular weight heparin, which is frequently given to inpatients who are on aspirin for other reasons. Thromboprophylaxis should not be altered because a patient has been randomised to receive aspirin (see protocol section 2.4.3), and if the use of aspirin alongside standard thromboprophylaxis is thought to be contraindicated by the managing doctor, the patient should not be included in the aspirin randomisation (but could still be entered into randomisations in RECOVERY that involve other treatments).

7. Does aspirin need dose adjustment with renal impairment?
No.

8. Can aspirin 150mg be given during pregnancy?
Yes, this dose is commonly used for the prevention of pre-eclampsia[9]. See protocol appendix 4.

References

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