CLOT+
PATIENT EVIDENCE SUMMARY

Doctor, I heard that COVID-19 causes blood clots. I have a history of DVT or PE, what do I need to know to protect myself?

For people who have a history of DVT or PE and are diagnosed with COVID-19:

If you are on anticoagulants, continue to take them as instructed.

If you are not on anticoagulants and are diagnosed with COVID-19 infection, ask your doctor if you might benefit from taking anticoagulants temporarily.

Stay as active as you can around your home.

Study highlights

There is a lot we don't know about COVID-19. If you are asked to participate in a study, please consider doing so - we need more answers!


Watch for signs of DVT and PE

What's the issue?

Understanding the problem

The COVID-19 virus has caused millions of people around the world to become sick. One of the complications of infection with COVID-19 for some people has been the development of blood clots.

Infection with viruses and bacteria causes inflammation which helps the body to fight against the infection. However, inflammation can also trigger the blood clotting system. This seems to be the case for COVID-19 because high rates of DVT and PE have been reported in people who required admission to hospital for COVID-19 infection.

There are two types of blood clots that occur in people with COVID-19:

1) In people who have life-threatening illness due to COVID-19 infection in their lungs, inflammation causes damage to the lining of the blood vessels within the lungs. This inflammation causes blood clots to form at the damaged sites and, along with fluid in the lungs, make it hard for the body to get enough oxygen. These clots are small but are very common in this group of extremely ill people.

2) Less commonly, people who are ill with COVID-19 can also develop larger blood clots that form in the legs (deep vein thrombosis; DVT) some of which may then travel to the lungs (pulmonary embolism; PE).

There is a lot we do not understand about the effects of COVID-19 which is why high-quality research is so important. Based on what was known at the time of writing, the researchers in this review provide suggestions to doctors on how to prevent and treat blood clots in people who are infected with COVID-19.
The research

A summary of all studies published up to April 2020.

Who? People diagnosed with COVID-19 infection.

What? Studies that collected data on people with COVID-19 infection who were diagnosed with PE or DVT.

Summary of findings

<table>
<thead>
<tr>
<th>People with COVID-19 infection</th>
<th>Results</th>
<th>Number of studies and quality of evidence</th>
<th>Suggestions by Bikdeli and colleagues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required admission to hospital</td>
<td>25-40% were found to have DVT or PE (most were in the ICU because they were extremely ill due to COVID)</td>
<td>2 studies; total of 279 people</td>
<td>Low-dose anticoagulants should be given to all admitted COVID patients who are not bleeding</td>
</tr>
<tr>
<td>Well enough to stay home and have a history of DVT or PE</td>
<td>No reports to date</td>
<td>No study data available</td>
<td>Stay as active as possible; Continue to take anticoagulants if already on them; Discuss with your doctor if you should start or restart anticoagulants if you are not currently taking any</td>
</tr>
<tr>
<td>Well enough to stay home and do NOT have a history DVT or PE</td>
<td>No reports to date</td>
<td>No study data available</td>
<td>Stay as active as possible</td>
</tr>
</tbody>
</table>

This Evidence Summary is based on the following article:

Published: Thursday, July 30, 2020
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