

## Thrombotic Complications in Children in the Postcovid19 Period: Clinical Cases

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## 6 Abstract

7 Resume-The high incidence of arterial thrombosis and venous thromboembolic complications  
8 in patients with SARS-CoV-2 coronavirus infection indicates the need for an in-depth study of  
9 the pathogenetic moments of procoagulant status and a more rational approach to preventive  
10 measures.The aim of the work was to study clinical cases of thrombotic complications in  
11 children with coronavirus infection to substantiate the principles of practical approach to  
12 treatment and prevention.This article presents clinical cases of thrombotic complications after  
13 COVID-19 in four children 12 months, 12, 16 and 3 years of age.

**Index terms**— children, COVID-19, thrombosis, hypercoagulability, blood vessels, post-Covid19 syndrome.

1    ?????????? ?????:

17 D??????, COVID-19, ????????, ??????????????????, ??????, ?????????????? ???????, ??????????? ???????,  
18 ???????, ?????????????? ???????????, ??????????????. Resume-The high incidence of arterial thrombosis and venous  
19 thromboembolic complications in patients with SARS-CoV-2 coronavirus infection indicates the need for an in-  
20 depth study of the pathogenetic moments of procoagulant status and a more rational approach to preventive  
21 measures.

The aim of the work was to study clinical cases of thrombotic complications in children with coronavirus infection to substantiate the principles of practical approach to treatment and prevention.

This article presents clinical cases of thrombotic complications after COVID-19 in four children 12 months, 12, 16 and 3 years of age.

In the first and second cases of children with congenital heart disease after coronavirus pneumonia, thrombotic complications in the form of a thrombus in the right atrium and a thrombus in the hepatic segment of the inferior Author ?: e-mail: saatova@mail.ru vena cava were detected. In the third case, occlusive thrombosis of the common and external iliac veins on the left and the external iliac vein on the right was detected. In this case, the child was diagnosed with secondary antiphospholipid syndrome. In a clinical case, a 3-year-old child developed acute cerebral circulation disorder with ischemic stroke in the middle cerebral artery basin after a COVID-19 coronavirus infection. ??? ?????????? ??????? ?? 10.12.21?: ??????, ?????? ??????, ?????????????? ??????, ??????????, ??????????, ??????????, ?????????, ?????????, ?????????, ?????????, ?????????, ?????????, ?????????, ?????????, ?????????, ?????????, ?????????, ?????????, ?????D?" ?? 13.12.21?: ??? ??????????, ??? 150 ?? ? ???, ?????????????? ??? ?????? ?????????? ??????. ?????????? ??????????, ?????????? ?????????? ?????????? ?????????? ?????????? ?????D?" ?? 09.12.21?. ???: D?"??? (????????? ???). ?????????? ?????????? ?????? ? ?????? ?????? ?????? ?????????? 1,7 ? 1,6 ?? ?????????????? ?????? (???. 1).

## 2 Keywords

38 ??????????? ??????: ?????????????????? ?????? (?????????? 350?? ? 4 ?/????? ?6; ????????, 3,0 ?? 1 ?/?????)  
39 ?11; ????????, 110 ?? ?/?), ?????????????????? ?????? (???????, 500 ?Д???" ?? 0,1 ? 4 ?/????? ?/ ? ????????????  
40 ???????, ????????, 2,5?? ¼ ??? ?1/2 ? ?1/3 ? ? ???), ?????????? ?????????? (?????????? ½ ??? ? 1 ?/?????),  
41 ?????????????????????? ?????? (???????, 3,0 ?? ? 2 ?/?????).  
42 ????????, ?? ???, ?????? ???????????????????, ?????? ???, ?????????? ??????????? ?? ??? 93-96%,  
43 ????????????, ?????????? ?????????? ??????. ? ????????, ?????????? ?????????? ? ???????, ???????, ??????????  
44 ???????????, ? ?????????? ? ?????????? ?? 1,1 ? 1,0 ??, ?????????? ?????????????? -<????????? ? ??????????

## 2 KEYWORDS

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45 ?????????????? ??????? ???. ?????????? ?????????? 2,5?? ?? 1/4 ??? ? 1 ??? ?????? ?????????? ?????????? ??????? ?  
46 ??????????.  
47 ?????????????? ?????????? ?????? ?? ?????????????? ?????? 4 ??? (???, ???, ???). ??????????  
48 ?????? ?????? 7 ????. ???D?"? ? ?????? ? ?????????????? ?????? 1 ??????. ? ?????????? ?????????? ??????:  
49 ?????????? 0,6 ?3 ?/? ?? ? 0,6? 2 ?/? ?1 ?0,6 ?3 ?/? ?1 ? 0,6 ?2 ?/? ?1? 0,3 ?2 ?/? ?1? 0,3 ?1 ?/? ?1;  
50 ?????? 500 ?? ? 1 ??? ? ??? ?6; ?????? 8?? ?16?? ?8?? ? ????-?? 100,0 ? ?????????? ?? ?????? ? ?????????;  
51 ?????? 2,0 ?/? ????. ?5; ?????????? 1 ????. ??? ?19; ?????? ?????????? ? ?????? ??????????; ?????? ????  
(????????????? ??????????????) 0,4 ??/??(????????? ??? ? ?????? 5 ???); ?????????? <sup>1</sup>

II. D?"?? ? ?????????? ?????? (???) ?????? 4: ?????????????? ?????? 2021 ?. ?? 24.11.22  
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			4.82140	258
			5.00142	311
29.12/21			4.98143	309
14.01.22			4.93140	319

?????? 2: 10.12.21 5,0 4,53 61,8 21.12.21 4,20 1,74 63,8 03.01.22 5,36 1,74 ?/?

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D?"????????????????? ?????? ??? ?????? ?????? ??????????, ?????????? 3:  
10.12.21??/?  
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2,20  
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Figure 1: ?????????????? ?????? ?????? D?"?? ??.???.?? ?????/ ? ?????. ?????, ?? ????. ?????,  
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<sup>1</sup> Thrombotic Complications in Children in the Postcovid19 Period: Clinical Cases

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## Thrombotic Complications in Children in the Postcovidae Period: Clinical Cases

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nal????? ?). ?????? 5: ????? ???? ????? ?????? 15.06.21 ??????????

of \* 10 12 /? 4,26 Hb, /? 123 ?? 0.8 ?????? \*10 9 /? 378 ?????? \*10 9

Med? 7,4 ??????%,% 1 /?,% 4 /?,% 52 ??????%,% 40 ??????%,% 3 ??????

i- ??????: ?????? ?? 1 ??? 2 ??? ? ??? 8, ?????? ?? 1,5 ?? 2

cal ??? ? ??? ?/?, ?????? ?? 1 ??? 2 ??? ? ??? ?????? ?? 1

Re-?. 4 ??? ? ??? ?/?, ??????, ?????? ?? 60 ?? 2 ??? ? ??? ?/?

seafdr????? 8, ?????? ?? 1 ?????? 1 ??? ? ???, ?????? ?? 1 ??? 3

40 ??? ? ???, ?????? ?? 1 ?????? ?????? ??? 1. D?"????? ??

Vol800 ?? (0,2) 4 ??? ? ??? 24, ????? ?? 1250 ?D?" (0,25) 4 ??? ? ???

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Ver386 7,6 1 2 53 41 3 ?????????? ?????? ?? ?????? ?????? ?? ??????

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) 4goes here. File name: Figure 4General blood test.gpeg ?????? 4. ??????????

F ?????? ?????? ?? (?? 28.03.21): ??? ????/?????, ??????????, ???..????????-

1020, ?????? ??????, ???, ?????-??., ??? ?? 3-4-4, ?????? 2-3-4-4,

????? ????. +, ?????? ??? ?? ?????????? ?????????? 2750 ?? (?? 12.04.21):

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?????-??., ??? ??, ?????., ?????? 1-1-3, ????. + ?????? ?? ?????(??

28.03.22): ??? -20,0 ??/?, ??? ?????-8,45 ?????/?, ?????????? ?????-2,43 ??,

????? ??? -77,1 ??/?, ?????? -4,51 ?????/?, ?????????-68,3 ?????/?, ?????

?????-5,52; ???-63,2, ???-99,5, ??? +, ?? -??., ?? -2,13, Fe -8,4 ?????/?, ??-1,29

(31.03.22): ?? . ?????????? ?? ?? -????? -9'38", ??-14,3"; ??-85,7%, ??-

1,17, ??? -25,3", ?????????? -3,9% (04.04.22): ??-12,7"; ??-98,4%, ??-1,03,

??? -24,1", ?????????? -4,2 ?????? ?? ?????(?? 08.04.22): ??? ??????????-

7,73 ?????/?, ?????????? ?????-3,51 ??, ?????? ?????? -70 ??/?, ?????????? -5,37

?????/?, ?????????-77,4 ?????/?, ??? ?????? -4,47; ???-15, ???-43,0, ?? -2,29,

? -1,43 ?????? 8: ?????????? ?????? ?????? Figures D?"????? ??????????????

?? 4 4 ?????? 6: ?????????? ?????? ??????: ??? 16,7" ??? 77,8% ???

1,21 ?????????? 2,4 ?????? ?????? ?? 15.06.2021: ??? ?/?, ??????????

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## 2 KEYWORDS

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(Karikalan S. 2022). ?????? 38,5?.  
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of 19 D?"????? ??.. 2017 ???  
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6 ?????????? 5 ??????. ?????????????? ?????? ????. ?????? ???, ?????????? ??  
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?? 2-3 ?????????? ?????????? ?D"? ?????????? ?????????? ?????????? ??????????  
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?D"? ?? ??D"? 210 ?? ?? ?? ????? NIHSS ?? 10 ????. ?????????-26 ?.  
3400 ?? . ?????????? ??????, ? ????? NIHSS ?? 17 ????. ?????????-21 ?.  
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