

ХРОМОСОМНЫЕ НАРУШЕНИЯ ПРИ ГЕМОБЛASTOZAX

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Филиппова Алла Викторовна

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?po?o?o????? ??o????? ?op????????? ?????????????????? ? o?????????
????????? ? ???o?o ???o????? ?o? ?o????????????? ???opo? ?????????? ?
????p????? ?p???. ???o????????????? ?o??o o????????? ???o? ??op????????o?
(????????o?, ????????o?) o?p??o????? ?po?o?o????? ??o????? ???
2—4 ?????????? ?o????? ?? 1000 ?????????? ???o?. ??? ??o?????
????????? p????????o? ?????????? ??o?? ? p??o?? ???o????? ??????, ??????
p????p????, ?o?op?? ???p????? ??p????? ? ?????? p?????o?o ???.

? ?p????? ???op??, ??o?o????????? ?????????????? ?????? ?????? ? ?po?o
?o????? ??o?????????, o??o????? ?o????????? ?? ???o????? ???o?o?????????
?????o?, ?????, ??? o????????? ?????????????? ??????????????, p?????????
?p???p???. ?o????????????? ?????? ? ?po?o?o????? ???pp?????
(o????o????????? o? ?op??) ?o????? ??po????????? ?op??po????? ? ??????????
????o??o?o ??o??, ??o?o??o?o ? o???o????? ?p????op?????.
??o ?o????p????o ??o?o????????? ?????????????? o???????, ?po?????????
?p??? ???, ?????????? p??o??? ?o????? ? ???o?op??? ?????????????? ?o
????????? (????o?o?, ???o?o? ? ?po?????). O????o, ?????????????? ????
????o?, ?????????? ?po?o?o????? ??o?????, ?? ?p??o??? ?
?o?????o????? o???o??, ? ??? ?o????? ??po???o??? ?? ?o?????o?????
? p??????.

???????, ??? ????????, (**leucaemia, leucosis**) — ?????????? ??????????? ??
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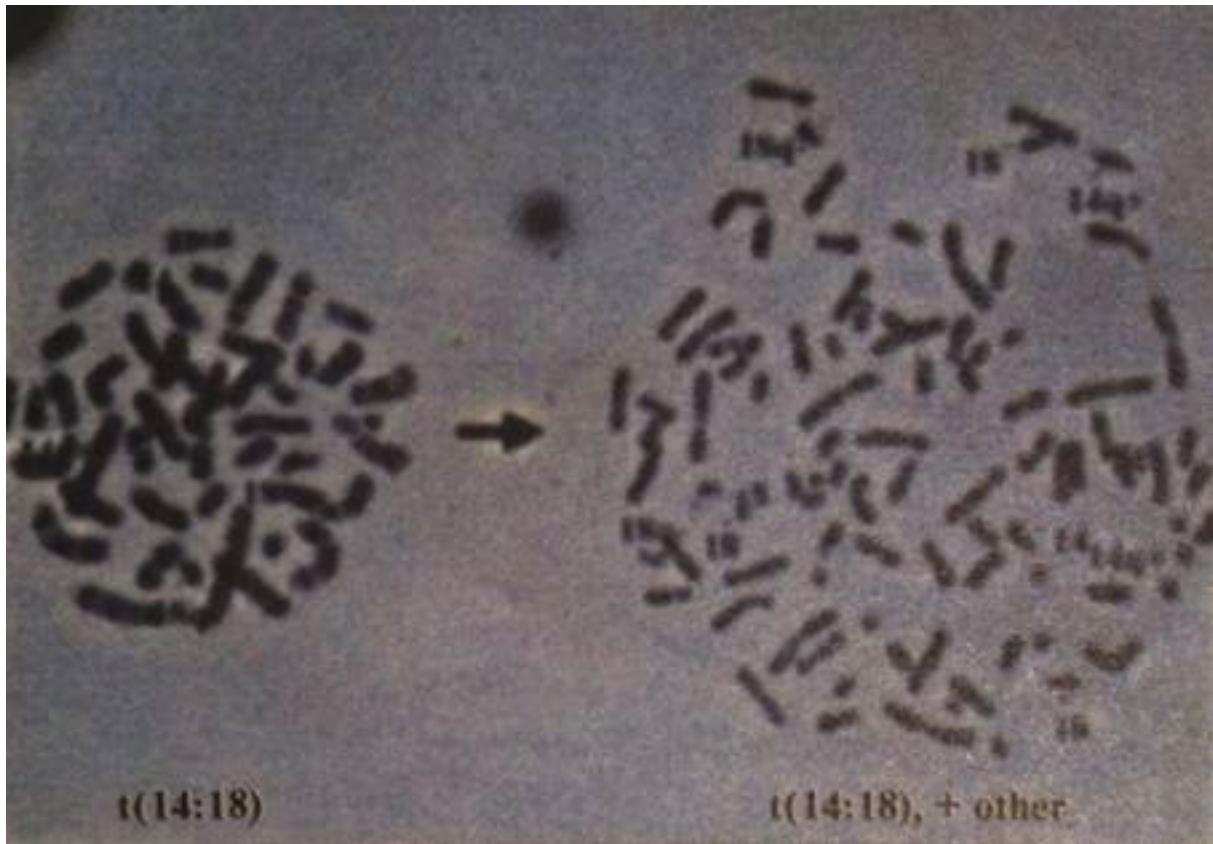
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????o?? ?o????o? ???o?o????? ??????? ?op??po?????
??o?o?????o?o ???o?o?o ??o?? ?? ?po????op??? ?????? — ?p
???????????, ??o????? ?????? ?o?o????o ?o??? ?????p????po?????
????o?.

O???o??, ?p? ???o?????????o? ?????o????? ?o??po? ??????? o???
??o?, o????????? o? o???o?? ? ???o????? ?????o????: o?? ?o??
??p??????, ???o??? ? ?????????????? ????? ??????????po?????.
??p???p, ? ?op?????? ?????? ?????o????? ?????? o?????????
? o?o????? ?o???. O????o ?p? ?????o ??????? o???o???o? ?po?????
????????? ???o????? ?p? o??po? ???o????????? ??????? ??????p?p?????
(?po?????) ? ?o?o??? o?o?o???, ?????? ???po????????? (o?o?????
????? ???o??). ?????? ?o??? ?????o?o? ?o????? ?o?o?????????
?p???o??? ? ?????????o? o?o?o???, ?o?o???? o?? ??????? p???p???po?
?????????? ???po????? ???o? ? p????? ?o?o?o????? po???,
????p???po??? ? ?????????po?????.

??? ??????p????????o? ??p?????o ??? ?o??? ?????o?o?????????
??o???????, o?o????o ??? ???o?, ? ?????o???, ??????p?o?,
?po?????o?o ???o????o??, o??p??, ? ?????? ?op???o ?o???????? o???
??p??? ??????.

?po?o?? ???o????????????? ?????o????? ? ?????o?o???, ?p?????
????o ??????? ?o????o??? o???p????? ?o?o?o???? ?o?????
? o????????? ?po?p??? o???o???o? po?????. ?? p??. 1 ?o????o, ???
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?o???o?o ?o???.



P?????? 1. O???o????? ?po?p?????

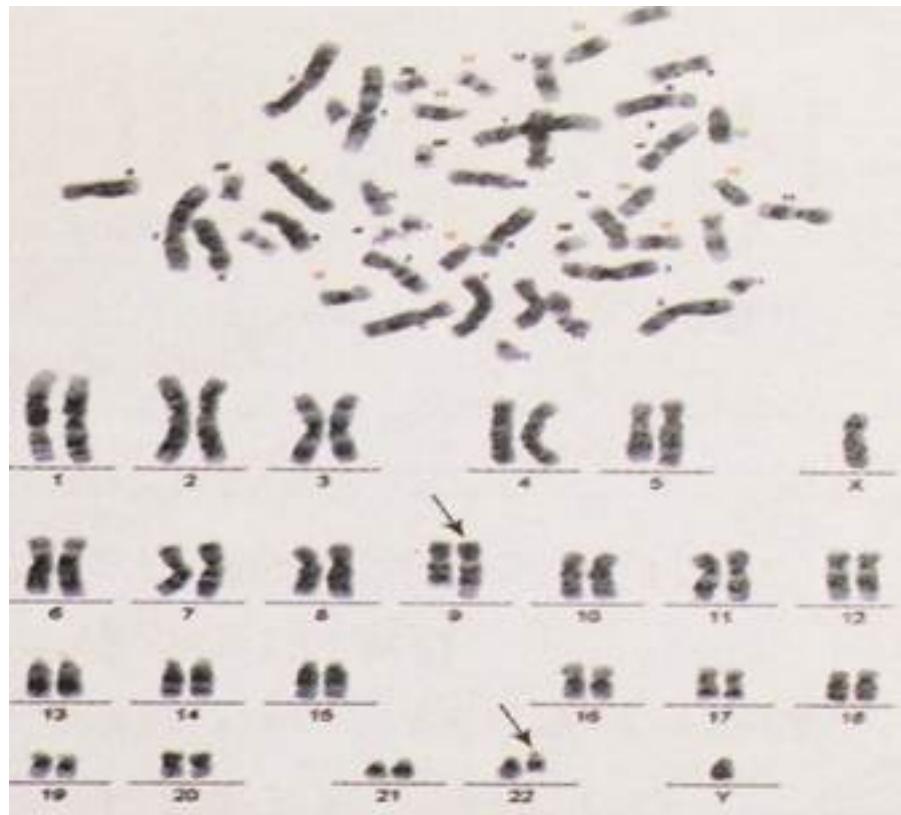
??? ???o?????o?? ?o ?????? ??????? ?o???? ??????o?????
???o?????????. ? ????????, ?o??? ???o?????o?o ??????,
?po?o????? ???o????????? ?????o????? ?? ?????? ??? o?????????
???o?o????? ???o????? ??o?o? ??? ?o?o, ??o?? ??????
?o??o? o? o?o????? ??? ?po????????? ??p????.

???p??? ???o????????? ??o?????o??? ?p? ???o??? ???
?o????p????? 40 ??? ????, ?o??? ? 1961-? ?o?? N?wel ?
Hunderf?rd o????? ?????????????? ?po?o?o?? ?h ? ?????? ?????? ?
o???o?o ?o??? ? o????? ?po????? ?????o????o?o?. ??? ??opo?????
?po?o????? ?? ?p???? ??? ?po????p????? ?po?o?o?,
???op?? o?p????????? ?o??? ? 100 % ?o?????, ????? ?????????? ???
????o?o ???o?????.

? ?????????? ??????o??, ??? ?h ?po?o?o?? ???????
?o?????????o? p?????o????? (?o ??? ??????) ?p????o????? ????

????????? ??????? 9 ? 22 ?po?o?o??.. ? p?????????
?p????o????? o?p?????? ?????p??? ??? (?????? ???, ??????????? ? ???????????
?????????????). ?o?????? ??o?o ??? p????????????? ??? ??p????o?
?o????? ? ???o????? ?po?????o?o ???o????o??. ?po???? ??????????
????????? ??? -???o?o????? ???o? p210, ?o?op?? o?????
?o????????? ??po????????o? ?????o????? o? p????????? ? ?op?????
???o?. ?p??o?????, ??? ???o? p210 ?????????? ?o?????????
????????o??? ???o? ?????? ??o??po????? ??o??o??, ?p??o??? ?
???o??o?? ?????p??? ? ?????????? ???o???? ??? ? o??? p??.

?p? ?po?????o? ???o????o?? o???o????? ?po?p????? ??p?????
???o??? ?p?o. ??p?? p????p????? ?????? ?o????? ?o?po?o?????
?o?o??o????o????, o???p????????? ?p????????? ?o ??? ??????
?o????? ?o???. ?? p??. 2 ?p????????? ?h⁺— ?????? ? o??? ?????o?
??p?o???? ?????? ?o???o?o ?o??? ?????? ? ?po????????? ???o????o?o?.
? ????????, ??p?? ???o???o ???, ?o????????? ???o???. ? o?????
?p????o????? ?o??? ?p?o?????????, ???p??p, ???o??? 8-?, 18-? ??? 21-?
?po?o?o??, ??o?po?o?o?? 17, ?o?o????????? 2-? ?po?o?o?? ??? ?p?????
?po?o?o????? ??o?????. ??o ?????? ?????o? ?p????op????? ?o?????, ?p?
?o?opo? ?????? ?o???o ???o????????? ???o?o? ?o?o?o ?????p?????
??o?p??? ???o????? ?? ???o???o ?????? ?o ?o?????
????????? p??????.



P?????? 2. ???o? o?p??????? ?po?o?o?

??p?????? ??????? ?p????o?????.

O??p?? ???o????? ???o? ?o??? ??? ? 70 % ??????? ??p????p??????
 ?????????????? ?po?o?o????? ???????????, ?o?op?? ??p????po???? ?
 ?op?o?o??????, ???o??o????????? ? ???o?????????????
 ??????????????. ?? ?????? ?????op?? ?po?o?o???? ??p???po??
 ??????? o????????? ?o?o?o????????? (??o??o?????????) ?op?? ???o?o?.
 ?????o????o, ??o ??p??? ?p? ??p???po??? ??????? ? ?opo??? ?po?o?o?
 ?p? ???o??? ?o?o?o????o??? ? ?po?????? ??p????. ?p? ???o?op?? ????
 ???o?? ??? ??????? ??? ?o??? 100 % ?????o???. ? ???o???? ?p??? ???
 ??o ?????o?o ??????? ???o?? ??? ?p?????, ??????? ??????????????
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 ???????, ?????????????????? ?? ?????? ???, ??????? ?????? ???, ??? ???
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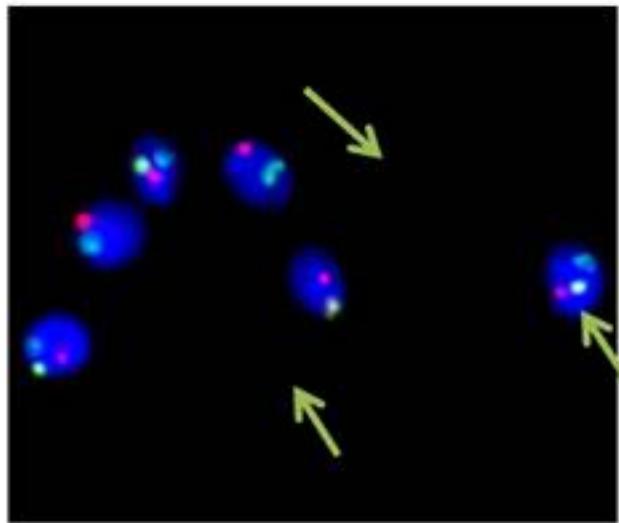
?p? o??p?? ???o????? ???o??? o???p????? ??o?o?o???? ??p??????, ?
 o?op?? ???o???p????? ? ?o??? ?o?o?o?: ?o?o?o??? ?
 ?????? o?p????????? ?o???o? ?????? ?????? 3-, 5-? ??? 7-? ?po?o?o?,

??p????p??? ??p?????? ? ???o?? ???o?o ?? ??? 11-?
??o?o?o??, o?o????o ? o?????? ? ?p??o???? 8-? ?po?o?o??, ? ???
??o???? ?o????????? ??p??po??? ? ??o????????? ??p??p???. ?p?
????????? ??? ?o????? ?p????? ?????????????? ?????? ??????, ??p
??o ?????????? ???o?o?o???? ??p???? ??? ?o?o??? ?p????????? ?o
??o?o ?o???.

?p? ???o????o??? ?????????? ?po?o?o????
??pp???? o???p????????? ? 60—70 % ??????. ?opo??? ?po?o? ?p?
????o??? ?????? ???o, ??? ?p????o, ?p? o???p?????
?op????o?o ??p?o????. ??o o????????? ??o ???o?o? ?
??o? o?????o?? ?opo?o?o ??o?? ???o?, ???o ??o?? ???o? ?
??o?????, ?o?op?? ???p????? ??o????? ?????? ??o??. ????
??o????? ???o?o?o ?????? ? o?o??? ?????????? ??o?????????
??o??? ?????o????.

? ?o????? ?p??? ??? ?o????? ?????? ? ??????o? ???o????? ?
p?o?p????? ?p???????? p????????? ??p????o? ???o?? ???op?????o?
???p????? in situ (FISH). ???o? ??? ?o?o?o?o?o?o?o?
?o????????? ? ?p????p??? ??o????? ??o?o?o? ?? ?o?o?o?o?o?o?
???????, ?o ? ? ???p????? ??????. ??? o?o?o?o?o?o?o?o?o?
p????????o ????o, ??? ??? ?po?o?o?? ? o?o?o?o?o?o?o?o?
p????o, o???? ?o?o?o?o?o?o?o?o?o?o?o?o?o?o?o?o?o?
????p?????o? o?p?????. ?po?? ?o?o, ??? ???o?o?o?o?o?o?
????????? ??p?o????, ??p????p?? o???? ?????? ??o????????? ?????? ?
o????? ?????? ? 10—15 % ?????? ? ? ??????. FISH-???o?o?
?o?o?o ?????o???? 500—1000 ? ?o??? ???p????? ???p, ? ?o ?p??? ??? ?
o????????? ???o?o?, ??? ??????, 20 ??????, ??o ?????? ?????????? ???
o????? o????o????? ??o?o?. ??o? ???o? ?p????????? ??p??? ? ?o????? ???
o? ??p?o????, ?po?o????? ?p? ?????p?????o? o?p????????? ??????. O?
?o?o????? ?????? ? ?????? o?p????????? ???pp????. ??? ?o?o?
????o?? ? ?????????? ?o??p????? ?????o? ???o?? ? ??p?? ???o?
?o????o?o ? ?o?o??? ???op?????o-??p????o?o ???-?o???. ????? o?p?o?,
? ??p?? ?o???o?o ?o????? ???op????????? ?????? o?p?????o?o ????,
???? o???p????????? ???p????? ?????o? ???, ?o??? ?o?
????o? o????????? — ?????? ??? . ?? p??. 3 ?o????o ??????

????p?o?o ???? ? ?????p?????? ??p?? ???o? ?o???o?o ?o???
?o???o?o ?po????????? ???o????o?o?..



P?????? 3. ?????????? ???p?o?o ???? ? ?o???o? ?o???
?o???o?o ???o????o?o?

O??o?p?????o ???o???o????? ??? ???-?o??? ? ?????? ?po?o?o?? 22 ?
?po?o?o?? 9. ??? ?????? — ?????? ? op????????? ?po?o?o????? 9 (?????????
?????????) ? op????????? ?po?o?o????? 22 (po?o??? ??????). ? ??????,
????????????? ??????????, ???o ????? 1 ?p??? ?o????????? ???-?????
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? ?o????????? ?p??? FISH-???o? ???o?o ?p????????? ??? ?o???op
???? o????o??o?o ???o?o?????o?o ??o?? ?p? ???o???. ??o o???? ????o,
??? ??? o? ?o?o, ?????? ???o???? ?o? ??? ???, ?????? ???op ??????
?????. FISH-???o? ??????????, ?o??? ????o?o p?????, ?po?o????? ??
??p???? ?o???o?o ???o?o?.

???o????????????? ??????o????? ?o??? ?? ?o???o ??????
?o???o?o ?o??? ? ???o???? ?po?? (?p? ???o???o????? ??o?o?????????
????????opo? ???o??o?o ?????? ??? ?- ? -????o???o?), ?o ??????
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?o?o??o??? ? ???o? ?p?o? op????. ??????o????? ?po?o????? ???

??????p????? ???o????????????? ???o????, ??? ?
?o?????p?o-???o?????????????.

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?po????op???, ??? ??? ?o????? ?????????? ?po?o?o? ???
? p??p????? ??????, ? ??????????po???? ?op?o?o????? ?? ???o??o??o.
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?p??? ?po?o????? ?????o????? FISH-???o?o? ? ???p????? ??p?? ?
?o?p????o? ???o????o? ?????? ?? ???o?o????? ?????? ?
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o????? ??o?????, ??o?? ?????????? ??? p????? ??p????o? ???o?o?
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?o?????p?o-???o????????? ???o?o?.

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1. ???????./????.??????.?, ????????.?.?, ????????.?.—?????:
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