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ORIGINAL ARTICLE

Effects of antiviral therapy and drug withdrawal on postpartum hepatitis in pregnant women with chronic HBV infection

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Abstract

Objective 7 i e, ia, e e_e, f, iia l e a a ,i a a l , e i e e fe a, i Ba,8 e lie i e a, ma ,i i e a, i B i (CHB) ie, i e e ie ,e f i il fma a (7DF), a ma, .

Methods E li i e CHB e a, ma e e e e 8 , a e e ie 7DF a, 32 ee e, a i . 7 e a, e imma a l a 6 ee a,8 e lie . 7 e HB ima e a li ia l i mia l a ame e e m ,i e i e, a i a 24 ee a,8 e lie .

Results 7 e e e 264 ma m e e, e e a, i , i l i 96 , ea e e, i , l . Am 168 , ea e e, , 131 a e, e imma a l a,8 e lie a 37 a e d e, e ,i a a l a 6 ee a,8 e lie . 7 e i e e f , a, m e a, i i , l imma a e ,i a a l a d e ,i a l e e 28.1% (27/96), 23.7% (31/131), a 24.3% (9/37), i i i a, _ e e e ($\chi^2 = 0.607$, $p = 0.738$). N f, a f , e a e ,i , e e f , a, m e a, i. f e , , a 96.3% f , a, m e a, i i , l a 92.3% f , a, m e a, i i imma a e ,i a a l e ,i i 12 ee a,8 e lie . i e i d e ,i a l , e a e f , a, m e a, i e ,i i 12 ee a,8 e lie a 77.7%.

Conclusion ,i a i a, i ia l imma a l a 6 ee a,8 e lie i , a e_e, e i e e f , a, m e a, i i CHB ma e, , e d i ,i a l mi, e d , e e f , a, m e a, i.
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Keywords A, i ia l e a –He a, i B i –M, e, - il, a mi i – , a, m e a, i –Te f i i il fma a e

Introduction

He a, i B i (HB) ie, i i a l a l li e a, l , e, a a e a , i li e e e, i i, li e f il e a li e a e 1 4 . I C ia, , e e a e a i ma e l 28 milli a e , i i e a, i B, , i e a l 1 milli e e i 2020. A , 84% 92% f e a, e ll d a i ma (HCC) i C ia i e d e, i HB i e, i a 330, 000 e e e fHCC e e e a 5 7 . M, e, - il, a mi i fHB i a im , a, e e f, e i e a e e f i HB i e, i . 7 im e, e l , i e e, fm, e, - il , a mi i fHB , a, i ia l e a i e a e i e l m, e i e a, ma , i HB i e - , i . Ma , e a e i ma , a a, i ia l e a, ma , i, e e, 1/3 f e a f e a, ma , i i HB DNA e, i i a, l im e, e l , i a e fHB e l a mi i ma e , i e a, ma , i , a, i ia l e a, ma , 5, 8 10 .

A, l , - e a, i ia l e a i e, l e - mme e e, e e, e , fm, e, - il, a mi - i i e a, ma , i i HB i e, i , i i ia lla a HB A a e 4 l 10 I / mL, ma

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1 D e a, ma , fH a l D f i 2, B ii D, ia H , ia J Ca , ia M e ia l , i , B ii 100015, C ia

2 D e a, ma , fH a l D f i 2, e i , i D, ia Te a i H , ia J B ii 100015, C ia

3 D e a, ma , fG e l a O , e , B ii D, ia H , ia J Ca , ia M e ia l , i , B ii 100015, C ia

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Patients and methods

Subjects and study design

HBV DNA 0.05 250 IU/ml HBV DNA 250 IU/ml 500 HBV DNA 500. HBV DNA < 0.05 IU/ml HBV DNA.

Statistical analysis

C ... Mann–Whitney ... HBV ... HBV ...

Results

Patient enrollment and deposition

397 HBsAg ... HBV ... 30.74 ± 3.85 ... 112 ... 251 ... 106 ... 96 ... 24 ... 232 ... 168 ... 24 ... 131 ... 37 ... 6 (Fig. 1). HBsAg ...

Changes of biochemical indexes and HBV DNA during pregnancy

HBV DNA ... C ... 4 ... (Table 1).

Changes of HBV DNA content during pregnancy and after delivery

264 ... HBV DNA ... 96 (36.4%) ... C ... 168 (63.6%) ...

HBV DNA ... C ... HBV DNA ... 4 ... 6 ... (Table 2). ... (Fig. 2), ...

Occurrence of postpartum hepatitis and treatment

67 ... ALT ... 28.1% (27/96) ... C ... 23.8% (40/168) ... (Table 3). ... (p>0.1). ... 96.3% ... 92.3% ... 12 ... 6 ... 77.7% ... 12 ... (χ^2 = 2.876, p = 0.237) (Table 4).

5 ... ALT < 10 ... ALT ... 40 ... ALT ... ALT ... 10 ... ALT ... 22 ... ALT ... 7 (25.92%) ... 9 (29.03%) ... 1 (11.11%) ... (χ^2 = 1.190, p = 0.551). ALT ... 3 (11.11%) ... 2 (6.45%) ... 1 (11.11%) ... (χ^2 = 0.444, p = 0.801). ... 60 ... 32 ...

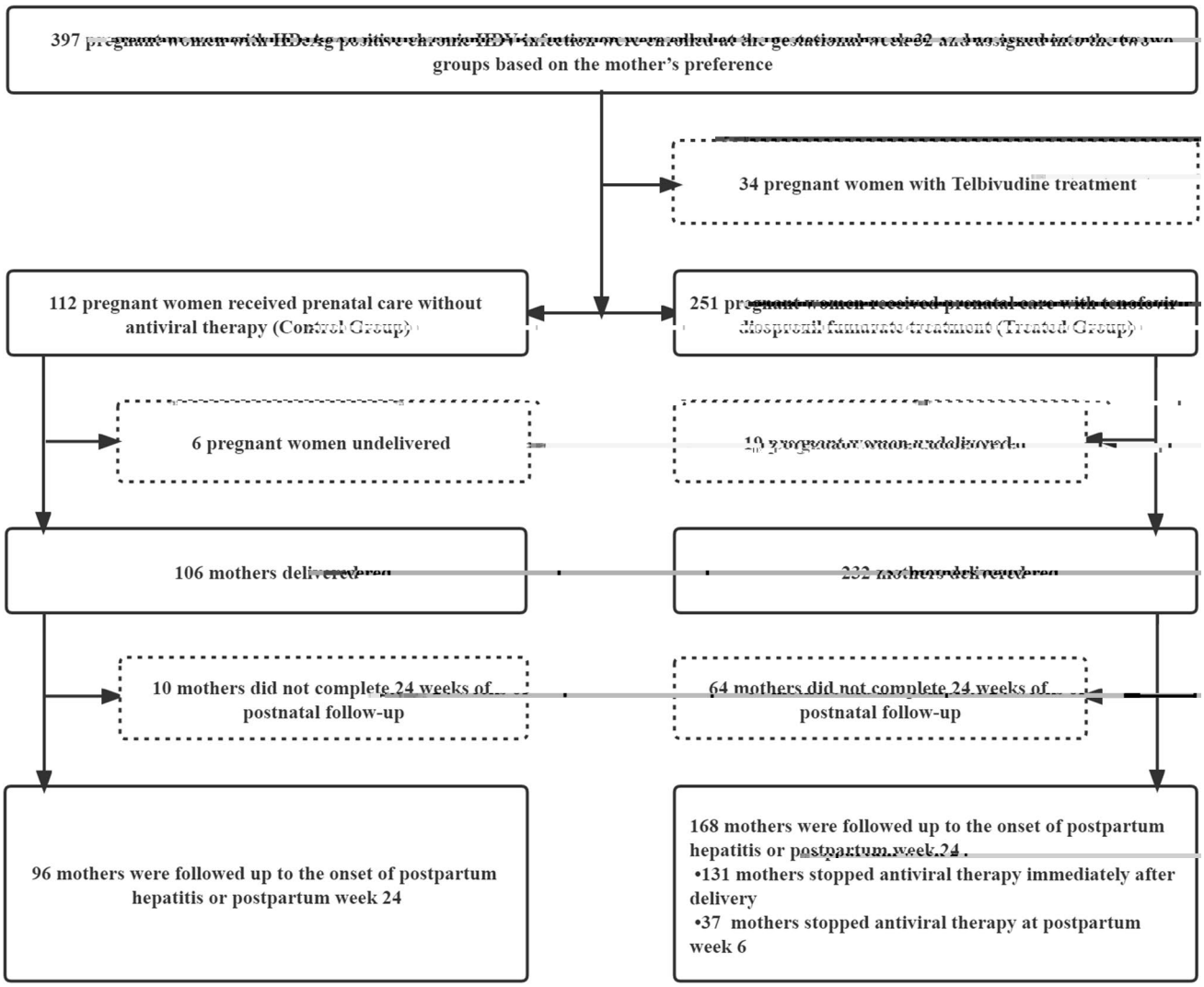

Fig. 1

, 28 , EG-IFN EG-IFN .

HBV markers at birth and blocking e ect of HBV mother-to-child transmission in newborns

, 189 , 157 , 50.07 1.07 , 3311.78 424.04 , 9.97 0.26, 5 9.99 0.22, 10 10.00 0.00. 7 7 5 1 f , 1 f , I 326 , HB , 41.4% (135) HB A , (HB A > 0.05 I /m) HB A 0.14 (0.08, 0.41) I /m 96.3% (314) HBsA , (HBsA > 1.0 /CO), HBsA 64.46(18.15, 169.72) /CO. 98.5% , HB > 1.0 /CO). 98.5% (321) , HB , (HB > 1.0 /CO). m HB DNA , 321 , 14.0% , (HB DNA 20 I /m), HB DNA , 3.47 1.33 I /m).

Table 1 C li ia l i 8m ia l a a m 8 i 8 a

	B 8 li 8 8 lh 8, (31 32 8 8 f 8, a i)				A, 8 8 lh 8, (a, i ia J 8 a 4)				B 8 f 8 8 li 8			
	C , l	7 8 4 8	T 8,	p a l 8	C , l	7 8 4 8	T 8,	p a l 8	C , l	7 8 4 8	T 8,	p a l 8
A 8 (8)	29.99. 3.60	31.35. 3.95	2.805	0.005	/	/	/	/	/	/	/	/
HB DNA (l 10 I /mL)	7.99. 0.62	8.03. 0.51	0.676	0.500	7.55. 0.80	5.20. 0.72	9.910	< 0.001	7.87. 1.20	4.50. 1.03	23.928	< 0.001
HB 8A 8, i 8, %	100%	100%			100%	100%			100%	100%		
AL 7 (/L)	22.17. 14.80	23.46. 20.03	0.051	0.960	20.71. 27.69	23.75. 18.81	1.050	0.295	18.41. 11.80	20.30. 9.73	1.770	0.078
A 7 (/L)	21.60. 14.61	22.44. 6.21	0.239	0.812	20.85. 13.03	23.63. 11.04	2.091	0.038	21.47. 9.22	22.72. 6.29	2.105	0.036
7BIL (m /L)	7.11. 2.41	7.74. 2.59	1.909	0.057	7.62. 3.44	7.99. 2.56	0.932	0.352	7.29. 2.68	7.48. 2.66	0.321	0.748
DBIL (m /L)	1.72. 0.76	1.771.23	0.157	0.875	1.70. 1.03	1.91. 0.87	1.396	0.164	1.68. 1.26	1.72. 0.82	0.062	0.951
ALB (/L)	39.03. 3.28	37.09. 2.07	5.525	< 0.001	36.75. 2.44	36.24. 2.66	2.714	0.008	35.77. 2.86	35.86. 3.06	0.446	0.656
GG 7 (/L)	10.15. 7.81	9.60. 6.73	0.957	0.339	9.79. 6.77	9.37. 5.61	0.997	0.320	10.06. 5.47	9.29. 4.86	0.273	0.786
AL (/L)	70.55. 34.25	76.80. 23.13	1.600	0.112	129.88. 52.41	149.66. 346.69	0.607	0.545	140.52. 32.73	159.07. 51.51	1.797	0.078
7BA (m /L)	3.25. 2.60	4.11. 8.91	0.531	0.596	3.70. 3.35	7.66. 41.40	0.902	0.368	8.90. 7.71	78.36. 536.73	1.155	0.253
B N (m /L)	3.08. 0.78	3.96. 11.64	0.662	0.509	2.92. 0.62	3.10. 0.80	0.994	0.321	3.91. 3.35	3.64. 0.90	1.147	0.252
C (m /L)	44.33. 5.78	45.63. 11.95	0.530	0.597	46.67. 5.19	50.90. 23.20	0.890	0.375	50.53. 8.63	55.51. 41.58	1.166	0.245
HO (mm /L)	1.11. 0.10	1.18. 0.65	0.865	0.388	1.15. 0.13	1.13. 0.13	1.075	0.284	1.13. 0.15	1.10. 0.17	1.382	0.168
7A (%)	109.99. 13.45	113.40. 10.34	2.089	0.041	116.68. 9.95	116.79. 10.59	0.102	0.919	117.03. 17.82	111.41. 15.73	2.732	0.007
IN	0.97. 0.05	1.35.										

No es: HB DNA: 8 a, i B i 8 i 8 8 i a i; HB 8A : 8 a, i B 8 a, i 8 ; AL 7: a l 8 a mi, a 8 8; A 7: a, a 8 a mi, a 8 8; 7B il, a l ili i; DB il i 8, ili i; ALB: A l mi; GG 7: l, a m l a 8, i 8; AL : a Ja li 8 a 8; 7BA:, a l i 8 a i; B N: 8 a, i 8 ; C : 8 a, i 8; HO : ; 7A: , m i, i 8 a, i, i; IN : i 8 a, i a l m li 8 a, i

Table 2 HB DNA

HB DNA	C	Imme	i-	D	T/p C-	T/p C	T/p Imme- D
B f a	7.99 0.62	8.05 0.51		7.98 0.52	0.708/0.479	0.077/0.939	0.648/0.518
4 a a	7.55 0.80	5.24 0.62		5.21 0.94	11.226/ < 0.001	6.966/ < 0.001	0.207/0.837
B f	7.87 1.20	4.51 0.99		4.53 0.96	22.875/ < 0.001	15.275/ < 0.001	0.016/0.987
6 a	7.87 0.93	7.98 0.73		4.80 1.79	0.866/0.388	9.339/ < 0.001	10.212/ < 0.001
12 a	7.41 1.50	7.83 1.21		7.43 1.55	1.276/0.211	0.049/0.961	1.336/0.184
24 a	7.13 2.11	7.34 2.03		7.10 2.13	0.535/0.593	0.056/0.956	0.476/0.635

No es: C Imme D 6

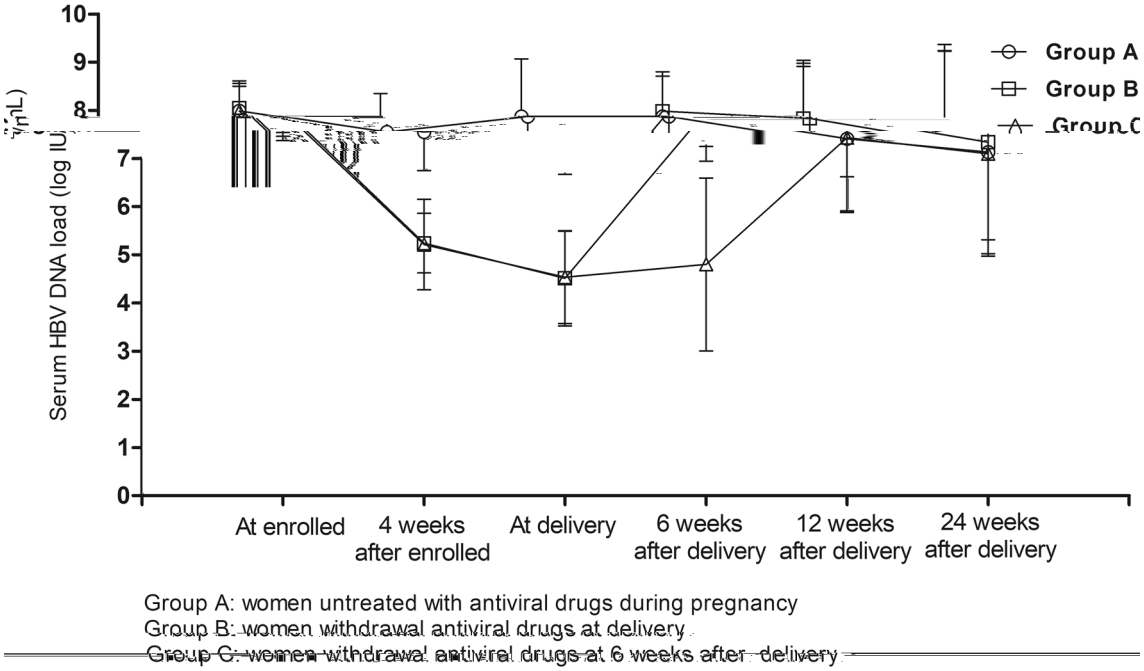

Fig. 2 C HB DNA HB

A HB HBIG 100 I 10 B 6 mm 1 6 m I 262 f HB m (155/156, 99.35%) (96/106, 90.56%)(χ^2=12.132, $p < 0.001$).

Discussion

G mme [5, 8, 10, 23] f B m

Table 3 I ie e f , a, m e a, i_ie e, i

C , l(n=96)	Imme ie (n=131)	Dela ed ,i a l (n=37)	χ^2/p a le , i a l	χ^2/p a le imme ie	χ^2/p a le , i a l	χ^2/p a le imme ie , i a l
I ie e f a, % (n)	28.1% (27)	23.7% (31)	24.3% (9)	0.580/0.446	0.195/0.658	0.007/0.934	0.601/0.438

N e: C , l a, i a l e, i ie
Imme ie, i a l, i a l , imme ie a le ie
Dela ed, i a l, i a l , a 6 e a ie

,i a l e e f e a, i a, e li i e a, me , i HB ie, i .

A, i ia l e a i e a ia im , a, me - e, im e, e l, i a e fm, e, - il, a - m i fHB . H e e, HB ie, e e a, me , i i ia, e a, i, li e i i i e a m , i e a, i ia l e a e e a, e li- e , e e l, e e a e, f m , 20, 21, 24, 25 . C e, l, e e i e e , , a, i ia l a, e li e a , e e, , e - e e f , a, m e a, i i, e e a, me , a, e a, i ia l i e a , e e, m, e, - il, a m i fHB 20, 21, 24, 25 . 7 e a im f i , , a, i e, ia, e e e, f, l a a l f7DF a, e li , e e e f , a, m e a, i a e a, i e e l me, i e a, me a e e i 7DF f e e, i fHB m, e, - il, a m i- i i e a , HB - ie, e e a, me , i i ia, e a, i, li e i i i e a e e e e l e . M e a ie, i e, e e , e e a m lia i a e, a i a l e, e - i) a e li e m lia i a , a, m e m- a e) , e a e f7DF e, e e f , a, m e a, i a e e i a i fli e f , i , a e, , i e, a i a l e, e i , e ma e , e fme m a e e, e a a l e e i a , e e a a / e li e m- lia i e e e l e i , . a e, , i , e a e fli e e e, li e i a i i e e a l e l e . A e e e a, i , e e a ll e a l im a ima e, , e e e l m , i e i 7DF a, i ia l e a .

7DF i e mme e e a , e , ie f e e, i m, e, - il, a m i fHB e a e, i a e e- , ie l i i, iHB e lia i , , i i ie e, a e a i a e e i e a 25, 26 . , e a e , , e a i fe d e a a l mm ia i , if e e m HB DNA f e a, me a e e , 10^6 I / m l e f e e li e , e m, e, - il, a m i fHB l e e e, ie l l e 27 30 . me , e i , e mme e a, i ia l e a i e a f l , i m, e, - il, a m i fHB i e a, me , i HB DNA $< 10^6$ I / m l 31 . A, l m , e, ie li e e mme e a, i ia l e a f e e, i f m, e, - il, a m i fHB f m 28 e e fe- , a i , 7DF a e e HB DNA m e, a 3 l (HB DNA $< 10^6$ I / m) i e a, me a, e 4 e e fe a- me , e e, , i i, i i f i e lia i 32 . 7 mi im e, e i , fe a e e, 7DF a e e, e i e e e, f e a, me , a, i ia l e a a, a e a 32 e e fe, a i i, , .

O , e , e , a, e e a e fm, e- , - il l , i e f i a 32 e e fe, a i a 99.35%, i a i a, l i e, a , a, i C , l (90.56%). A, e a me, in e, HB DNA

i a , HB DNA l f li a , , inf , i a a l

I i , , i a f , i ia l a , m , imm i a l a 6 a li i , a , i ie f a , i a li . A 90% f a , i i 12 a li i , , i a , i ia l , a , m , a imm i a , a li . D d i , i a a l mi , d , f , a , m a , i . O , a l , a , a , m 12 a , i a a i , f ll - i , m , i , f a , i . H , , m f m f ll - , i lim i , , i ie . a m , a m , i i f l 24 a li m l , i ie f a , mm , , i , f a 48 f , a , m i f , .

Acknowledgements

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