

Supplement data

Bleeding complications during pregnancy and delivery in haemophilia carriers and their neonates in Western France: an observational study

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Running title: Bleeding in pregnant haemophilia carriers

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	Carrier 1	Carrier 2	Carrier 3
Age	34 years	27 years	28 years
Type and Severity of Haemophilia	B ; severe	A ; severe	A ; severe
Basal factor levels	0.84 IU/ml	0.27 IU/ml	0.20 IU/ml
Mutation (gene)	g.31216T>G exon 8 (<i>F9</i>)	c.5953C>T exon 18 (<i>F8</i>)	Exon 26 deletion (<i>F8</i>)
Bleeding phenotype	no	yes	no
History of primary postpartum haemorrhage	yes	yes	no
Known status of carriers	Known	Known	Known
Third trimester factor levels	0.97 IU/ml	0.45 IU/ml	0.49 IU/ml
Place of birth	Other hospital	University hospital with haemophilia treatment centre	Other hospital
Type of labour	Spontaneous	Induced	Spontaneous
Analgesia	Epidural anesthesia	General anesthesia	General anesthesia
Haemostatic support	No	Factor VIII concentrate	Desmopressin
Mode of delivery	Normal vaginal delivery	Elective caesarean section	Emergency caesarean section
Placental expulsion	Active management with oxytocin	During caesarean section	During caesarean section
Bleeding complication during pregnancy	Placental Abruption	Metrorrhagia	Metrorrhagia and hematuria
Volume of blood lost during primary postpartum haemorrhage (cc)	500 -1000	500 -1000	>1000
Secondary post-partum haemorrhage	Requiring tranexamic acid	Requiring tranexamic acid	Requiring a visit in emergency care unit and administration of tranexamic acid
Description of Neonate	Female	Male with haemophilia, no bleeding complication	Unaffected male
Contraception after delivery	None	Progestogen oral contraceptive	Progestogen oral contraceptive

e- Table 1: Description of carriers who presented recurrent bleeding complications throughout a single pregnancy

	Newborn 1	Newborn 2	Newborn 3
Gestational age at birth , Weeks of gestation	27	39	39
Weight (g)	1100	3490	3885
Haemophilia A status	Mild	Severe	Severe
Bleeding complication	Subepidymal haemorrhage	Intracranial haemorrhage	Subgaleal hematoma
Prenatal diagnosis	No	No	Yes
Type of labour	Spontaneous	Spontaneous	Spontaneous
Mode of delivery	Emergency caesarean section due to Chorioamnionitis	Normal vaginal delivery	Emergency caesarean section due to prolonged labour
Screening	No	No	Yes: chorionic villous sampling
Maternal carrier status	Known	Known	Known
Breastfeeding	Yes	Yes	No
Duration of hospital stay (days)	26	Unknown	6

e-Table 2: Description of Neonates with bleeding complications

	Variables	Hazard Ratio (95%CI)	p
Bleeding during pregnancy and PPH^a	Cesarean section	7.4 (2.3 – 23.4)	< 0.001
Secondary postpartum haemorrhage^b	Basal factor level <0.4 IU/mL	5.1 (1.2 – 21.1)	0.025
	Cesarean section	4.0 (1.1 – 14.7)	0.037
	Age	0.8 (0.7 – 0.9)	0.048

* PPH = primary postpartum haemorrhage

a. Multivariate model 1 adjusted for type of haemophilia, type of labour, analgesia, mode of delivery, perineal injuries, and placental expulsion.

b. Multivariate model 2 adjusted for age, low basal factor level, primiparous carriers, bleeding complications during pregnancies and deliveries, use of preventive haemostatic support, mode of delivery, placental expulsion.

e-Table 3: Risk factors for bleeding complications in hemophilia carriers. Results from the multivariate analysis