

Summary of clinical data on neonates with Apgar scores of 3 or 4 at 5 minutes and birth asphyxia (all survived and went home)
 Pink rows are those where a FHR change was identified before birth by mother or staff prior to delivery.

Anonymised Infants with Apgar scores of 3-4 at 5 minutes at MTMH n =24

Number	FHR abnormal If YES describe	ACTIONS and mode of delivery	FHR normal	Any obstetric disorder. Yes/No If yes describe	Apgar scores Neonatal resus? Yes/No	How long in minutes neo resus?	NICU admit Yes/No How long? Days	Seizures in NICU Yes/No	Died in NICU Yes/No If yes what age?
1.		VD	9c	2.4 Kg	Apgar 3 and 4 Yes	10	9	No	No SBA
2.		VD	4c then refused	2.6Kg	Apgar 2 and 3 Yes	4	7 dys	No	No VSBA
3.	4c normal then 3c at 116-182	IVF, D50 CS		3.5 Kg	Apgar 3 and 4 Yes	25	4 dys	No	No SBA
4.	5c normal then 2c at 100-110	IVF, D50 VD		1.9 Kg and 1.8 Twin Ap 8-10 and 3-3	Apgar 8-10 Apgar 3 and 3 Yes	7	5 dys	No	No VSBA
5.		VD	2c normal	3.1 Kg Double cord entangled	Aps 2 and 4 Yes	10	9 dys	No	No SBA

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6.	3c at 116-119	IVF, D50, Pushing Breech delivery VD		On arrival breech 9cm dilated 2.9Kg	Apgar 2 and 3 Yes	5	8 dys	Yes	No HIE
7.	2c at 102-112 on arrival	Breech delivery VD		Meconium On arrival breech buttocks at vulva 2.2Kg	Apgar 2 and 3 Yes	15	6 dys	No	No VSBA
8.	2c normal then 2c 115-118	IVF, LLT VD		1.1 Kg preterm	Apgar 2 and 3 Yes	8	9 dys	Yes	No HIE
9.	On arrival 109-119	IVF LLT CS		Breech and FHR problem CS 3.8 Kg	Apgar 2 and 4 Yes	6	10 dys	Yes	No HIE
10.		VD	11c normal		Apgar 3 and 4 Yes	7	10 dys	No	No SBA
11.	3c normal then 3c at 104-119	IVF VD		Previous CS Vaginal delivery 2.9Kg	Apgar 2 and 4 Yes	7/20	11 dys	No	No SBA
12.	6c normal then 2c at 108-119	Breech extraction VD		Breech	Apgar 2 and 3 Yes	3	5 dys	No	No VSBA

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13.	4c normal then 2c at 117-119	IVF, D50 VD		2.2 Kg preterm	Apgar 2 and 4 Yes	3	7 dys	No	No SBA
14.	6c normal then 4c at 108-120 then 4c normal then 2c 117-118	LLT VD		3.2Kg	Apgar 3 and 4 Yes	2	7dys	Yes	No HIE
15.	15c normal then 7c at 153-190	CS		T-lie CS 3.8Kg	Apgar 3 and 4 Yes BM and drugs	5	7dys	No	No SBA
16.	15c normal then 7c between 107-119	IVF with oxytocin and push VD		2.7Kg	Apgar 2 and 4 Yes BM and CC	8	5 days	No	No SBA
17.	3c normal then 4c at 170 to 182	IVF and CS		Prolonged obstructed labour CS	Apgar 2 and 4 Yes BM and CC	10	11 days	No	No SBA

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18.	5c normal then 3c at 106 to 108	IVF D50 VD		3.8 Kg Double Cord entanglement	Apgar 3 and 4 Yes BM	3	7 dys	No	No SBA
19.		VD	22c normal	Post date given misoprostol for induction 3.3 Kg	Apgar 2 and 3 Yes BM	5	8	no	No VSBA
20.	17c normal then 5c at 100-109	IVF and push VD		2.3 kg	Apgar 2 and 4 Yes BM and CC	13	8 dys	No	No SBA
21.	11c normal then 6c at 98-106	IVF Refuse pushing then Vacuum delivery		3.1 Kg	Apgar 2 and 4 Yes BM and CC	15	7 dys	No	No SBA
22.	On arrival 90-109 MW	IVF Episiotomy and vacuum delivery		17 yrs obstructed labour CPD 3.1 Kg	Apgar 2 and 3 Yes BM, CC and drugs	5	15 dys	No	No VSBA

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23.	On arrival 188	VD		Prolonged labour Plan CS but vaginal delivery 3.3Kg	Apgar 2 and 3 Yes BM, CC and drugs	3	8 dys	No	No VSBA
24.		VD	11c normal	3.5Kg	Apgar 1 and 4 Yes BM and CC	5	6 dys	No	No SBA

Comment on 24 births at MTMH

All 24 received resuscitation lasting 2 to 25 minutes. 6 of the 24 receiving resuscitation, had normal FHRs and resuscitation lasted 10, 4, 10, 7, 5, and 5 minutes.

18 of the 24 receiving resuscitation had abnormal FHRs identified. Two were born by vacuum for problems pushing out the baby.

18 were Vaginal Deliveries, 2 vacuum deliveries and 4 CS.

4 HIE, 7 VSBA, 13 SBA,

Difficult to manage those presenting fully dilated.

Need **much more vacuum assistance** rather than relying on maternal pushing. Need to monitor for ketones regularly in labour.

Also need earlier referral and FHR monitoring at clinics