

RESULTS

Results

One hundred women were included for the study, 50 women were allocated to each group. Every woman were fullfilled the admission criteria by having two or more AFV measurements with reliable gestational age, the outcome information was available for all randomized women.

The mean ages of patients studied was 25.48 ± 4.35 years in group I and 25.52 ± 4.42 years in group II. There were 22 nulliparous women in group I and 21 in group II. Forty two and forty three women in group I and group II respectively were diagnosed as post-term pregnant women depending on both certain LMP and ultrasound dating, 8 cases in group I and 7 in group II were diagnosed by ultrasound done before 24 weeks of gestation (Table 1).

The range of gestational age at randomization was 289-292 in group I and group II (table 1). The range of gestational age at delivery was 295-301 in both groups (Table 3).

There were significantly more abnormal post-term fetal monitoring in group I than group II (36% versus 16%). There were significantly more abnormal amniotic fluid indices than the number of abnormal maximum pool depths (28 % versus 10%) There was no significant differences in the number of abnormal computerized CTGs between two groups (8% versus 6%) (Table 2).

There were significantly more induction for abnormal post term monitoring in the AFI group (30 % against 12 %). There was a trend

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towards more cesarean sections for fetal distress in the AFI group (8% versus 4%) (Table 3).

There were no other significant differences in the perinatal outcome between two groups, there were 6 cases (12%) presented with meconium Grade II & III in AFI group and 4 cases (8%) in MPD group. (Table 4,6,7,8).

Table 5 shows that there were 2 cases (4%) with low Apgar score 5m <7 in both groups. There were four infants who were admitted more than 24 hours in ICU, 2 neonates (4%) from each group and all of them were admitted for meconium aspiration. There were no differences in acid base status at delivery between two groups with only 4 cord vein pH value less than 7.26 (two in each group). There was no perinatal mortality recorded in any of two groups.

Table 8 shows that there was no significant deference between two groups as regard perinatal outcomes in cases with low amniotic fluid volume as from a total number of cases with low AFI (14 cases), there were four cases (28.6%) with meconium grade II and III, two cases (14.3) with low Apgar score 5m < 7, one case (7.1%) with abnormal cord pH and two cases with (14.3%) were admitted to ICU. In group II where total number of abnormal MPD values were 5 cases, there were three cases (60%) with meconium grade II & III, two cases (40%) with Apgar score 5m < 7, two cases (40%) with abnormal cord pH and two cases (40%) were admitted to ICU.

Table (9) shows that there were four cases with abnormal CTG recorded normal AFI in group I and three cases with abnormal CTG

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recorded normal MPD in group II. In the first group there were two cases (50%) with meconium grade II and III, one case (25%) with abnormal cord pH, and no cases recorded Apgar score 5m < 7 or admitted to ICU.

In group II there were one case (33.3%) with meconium grade II & III, and no cases recorded abnormal cord pH, Apgar score 5m < 7 or admitted to ICU.

Table (1):- Some demographic criteria

Groups characteristics	AFI+CTG N=50	MPD+CTG N=50	Chi-Squares	P-values
Age in years	25.48± 4.35	25.52± 4.42	-	0.67332
Nulliparous	22	21	0.04	0.8399251
Dating by ultrasound	8	7	0.08	0.7794345
Gestational age at randomization	289-292 days.	289-292 days.	-	-

Table (2):- Comparison between abnormal post-term fetal monitoring results in both groups

Abnormal Post term fetal monitoring	AFI+CTG N=18	MPD+CTG N=8	Chi-Squares	P-values
Reduced AFV	14	5	5.26	0.0217815*
Abnormal antenatal CTG	4	3	0.15	0.6951093

*Significant

Table (3):- Comparison between both groups regarding gestational age at delivery and mode of delivery.

	AFI+CTG N=50	MPD+CTG N=50	Chi-Squares	P-values
Gestational age at delivery (days)	295-301	295-301	-	-
Spontaneous vaginal delivery	25	35	2.97	0.091351
Induction of labor:	18	10	3.17	0.0747914
□ Abnormal post term monitoring	15	6	4.88	0.0271309*
□ Maternal request	1	1	-	-
□ 43 weeks	1	2	0.34	0.5577341
□ Other reasons☆	1	1	-	-
Caesarian section	7	5	0.38	0.5382527
□ Fetal distress	4	2	0.71	0.3997029
□ Failure to progress	2	2	-	-
□ Other reasons*	1	1	-	-

* High head (1), Polyhydramnios (1)

☆ Breech (2)

* Significant

Table (4):- Comparison between two groups regarding presence of meconium.

	AFI+CTG N=50	MPD+CTG N=50	Chi-Squares	P-values
Meconium:	8	6	0.33	0.5643513
□ Grade I	2	2	-	-
□ Grade II & III	6	4	0.44	0.5049851

Table (5):- Comparison between two groups regarding perinatal outcome.

Newborn infants	AFI+CTG N=50	MPD+CTG N=50	P-values
Birth weight(gm)	3510	3490	0.88917
Abnormal cord pH	2	2	-
Apgar score < 7 at 5 min.	2	2	-
Admission to neonatal ICU	2	2	-
Perinatal death	0	0	-

Table (6):- Relation of AFI and MPD to CTG, meconium, Apgar score 5m, acid base status, mode of delivery and ICU admission.

	AFI + CTG n=50		MPD + CTG n=50		Chi-Squares	P-values
	NO.	%	NO.	%		
Abnormal AFV	14	28	5	10	5.26	0.0226193*
Abnormal CTG	4	8	3	6	0.15	0.6951093
Meconium grade II & III	6	12	4	8	0.44	0.5049851
Apgar score 5 minute < 7	2	4	2	4	-	-
Abnormal cord pH	2	4	2	4	-	-
Inductions for fetal distress	15	30	6	12	4.88	0.0271309*
C.S for fetal distress	4	8	2	4	0.71	0.3997029
Admission to ICU	2	4	2	4	-	-

* Significant

Table (7): Relation between abnormal antenatal monitoring and perinatal outcome:

	Abnormal AFI+ CTG n=18		Abnormal MPD+CTG n=8		Chi-Squares	P-values
	NO.	%	NO.	%		
Meconium grade II & III	6	33.3	4	50	0.65	0.42
Apgar score 5 minute < 7	2	11.1	2	25	0.82	0.36
Abnormal cord pH	2	11.1	2	25	0.82	0.36
Admission to ICU	2	11.1	2	25	0.82	0.36

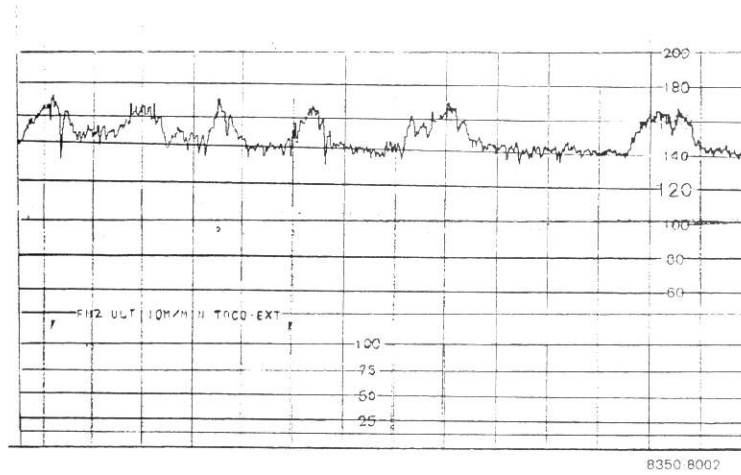
Table (8): Relation between reduced AFV in both groups and perinatal outcome:

	Abnormal AFI n=14		Abnormal MPD n=5		Chi-Squares	P-values
	NO.	%	NO.	%		
Meconium grade II & III	4	28.6	3	60	1.56	0.211
Apgar score 5 minute < 7	2	14.3	2	40	1.47	0.226
Abnormal cord pH	1	7.1	2	40	2.99	0.084
Admission to ICU	2	11.1	2	40	1.47	0.226

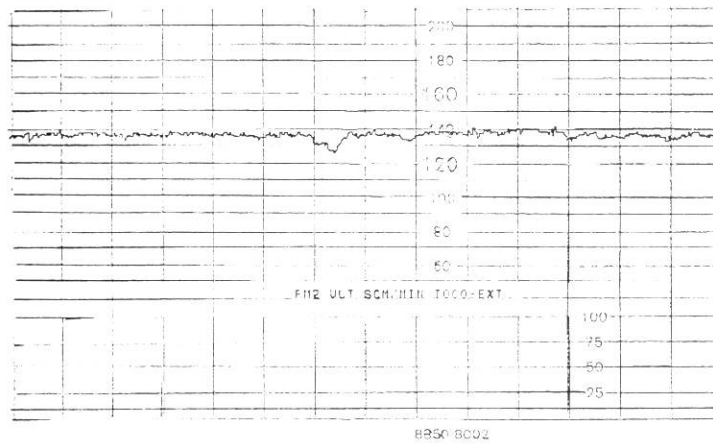
Table (9): Relation between abnormal CTG with normal AFV in both groups and perinatal outcome.

	Abnormal CTG in AFI group N=4		Abnormal CTG in MPD group N=4		Fisher exact
	No.	%	No.	%	
Meconium grade II & III	2	50	1	33.3	0.629
Apgar score 5m<7	0	0	0	0	-
Abnormal cord pH	1	25	0	0	0.671
Admission to Icu	0	0	0	0	-

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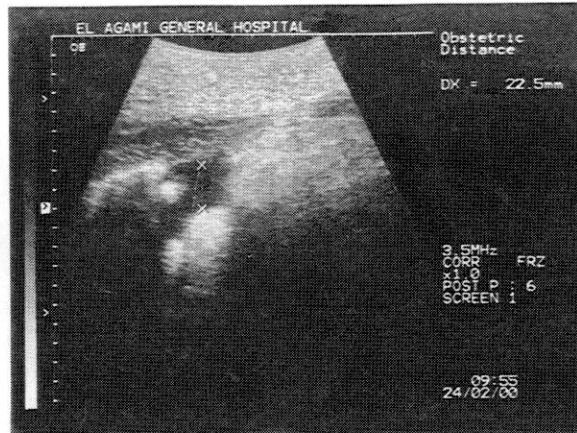


Reactive NST



Non reactive NST

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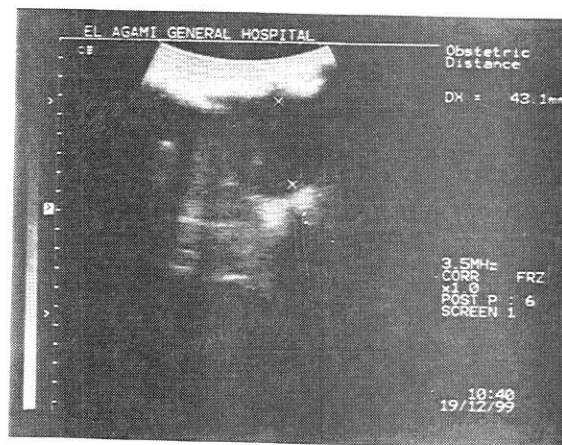


MPD = 2.25 cm



MPD = 1.14 cm

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AFI = 12.3 cm