RESULTS

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This study was done on 30 patients they were divided into two groups:

Group I (Intra vaginal Misoprostol) the initial dose of Misoprostol intra vaginally was 50 mg to be repeated every 4 hours, for 4 doses the 2nd dose was withheld if adequate cervical ripening, spontaneous rupture of membranes or hyper – stimulation occurred.

Group II (Oral Misoprostol): Misoprostol taken orally, the initial dose was 50 mg to be repeated every 4 hours, for 4 doses.

In this study: 8 patients (80%) out of 10 patients in the group I (vaginal misoprostol) achiveved vaginal delivery and 2 patients (20%) delivered by C.S one case due to poor progress and one case due to fetal distress. In group II (oral misoprostol): 15 patients (75%) out of 20 patients achieved vaginal delivery and 5 patients (25%) of cases delivered by C.S. two cases due to poor progress and 3 cases due to fetal distress.

Comparison of 2 groups

As regard to the pre – induction indices: age, pulse, Blood pressure, temperature and initial Bishop Score.

Table (8): Comparison of the vaginal group and oral group as regard to the pre-induction indices: age, pulse, blood pressure and initial Bishop score

		Vaginal	Oral	Analysis	
Age (years)	Mean ± SD range 15-25 26/28 28-30	26.5 ± 5.8 18-28 6(60%) 4(40%) 0(0%)	27.7 ± 4.69 20-30 14(70%) 4(20%) 2(10%)	t 0.61	P N.S
Pulse	Range Mean ± SD	70 – 100 78.3±6.95	75-80 78.3±2.58	1.02	N.S
Systolic Bl.p.	Range Mean± S.D	100-110 116.33±20.12	100-180 117.5±21.8	0.146	N.S
Diastolie Bl.p	Range Mean ± S.D	60-80 67±6.56	50-100 71.052±17.47	0.922	N.S
Temp	Range Mean ± SD	37-37.8 37.4±0.4	36.7-37.3 36.98±0.2	3.13	S
Initial Bishop	Mean ± SD Range <3 4-5	3.4±0.96 1-4 4(40%) 6(60%)	3.6±0.82 1-4 7(35%) 13(65%)	0.20	< 0.05

This table shows that there was no statistically significant difference as regard age, pulse, blood pressure, systolic and diastolic and initial Bishop score.

Table (9): Comparison between the two groups for Bishop score changes:

	Group I vaginal	Group II Oral	Analysis	
			t	p
Initial Bishop	3.4 ± 0.96	3.6 ± 0.82	0.20	<0.05
2nd Bishop	8.85±0.81	7.3±1.16	4.26	0.01
Bishop change	5.45 ± 0.09	3.70 ± 0.34	6.46	<0.001

Table (9) compares group I vaginal misoprostol group and group II oral misoprostol for initial Bishop score, 2nd Bishop score, and Bishop change. The mean initial Bishop score in vaginal group was 3.4 ± 0.96 while that in the oral group was 3.6 ± 0.82.

The mean 2nd Bishop score in vaginal (group I) was 8.85±0.81 was higher than that in the oral group (group II) with P<0.01 there was statistical significant differences between both groups.

As regard the Bishop change, the mean vaginal group (group I) 5.45± 0.09 was higher than in oral group 3.70 ± 0.34 with P<0.001 i.e. there was statistically high significant difference between both groups.

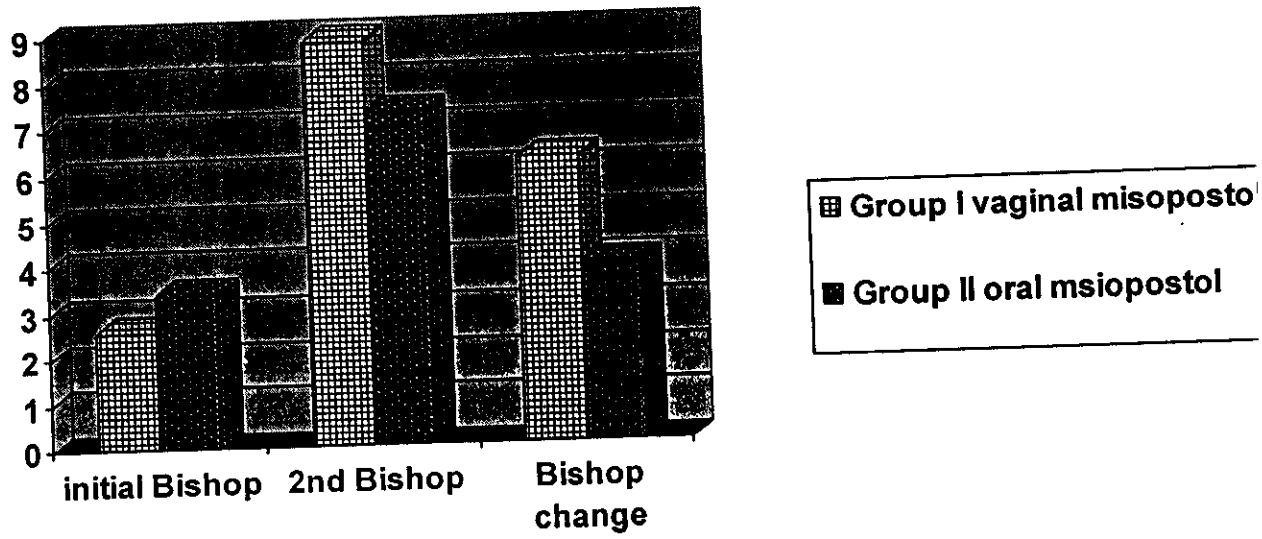


Fig. (3): Comparison of the studied groups as regard the initial Bishop score, 2nd Bishop score and Bishop score changes.

Table (10): Delivery data of vaginal group and oral group.

		Induction contraction time hours	Induction to oxytocin time hours	Oxytocin to vaginal delivery time hours	Vaginal delivery interval hours	Apgar 1 minute	Apgar 5 minutes
Vaginal group	Range	1-4	6-10	2.75±0.899	8-12	6-8	8-10
	Mean± SD	2.4±0.88	7.33±1.63		9.933±1.22	7.2±0.62	9.15±0.67
Oral group	Range	2-4	6-9	4.43±4.03	9-21	8-10	9-10
	Mean±SD	2.63±0.89	7.62±0.66		12.13±4.15	7.5±0.97	9.4±0.51
T-value	-	0.67	0.737	1.14	0.279	1.034	1.032
P-value	-	>0.05	>0.05	>0.05	>0.05	>0.05	>0.05
Sig	-	N.S	N.S	N.S	N.S	N.S	N.S

Table (10): Shows that the mean induction to contraction time in the vaginal misoprostal group was 2.4 ± 0.88 hours less than that in the oral misoprostal group 3.1 ± 0.737 hours. The mean insertion to delivery interval in the vaginal misoprostol group was 9.993 ± 1.22 hours was lower than that in the oral misoprostol group 12.13 ± 4.15 hours with P-value > 0.05 which does not reach statistical significant difference.

The mean interval form insertion to oxytocin in the vaginal misoprostol was 7.33 ± 1.63 hours and that of oral misoprostal group 7.62 ± 0.658 hours with no statistical significant difference.

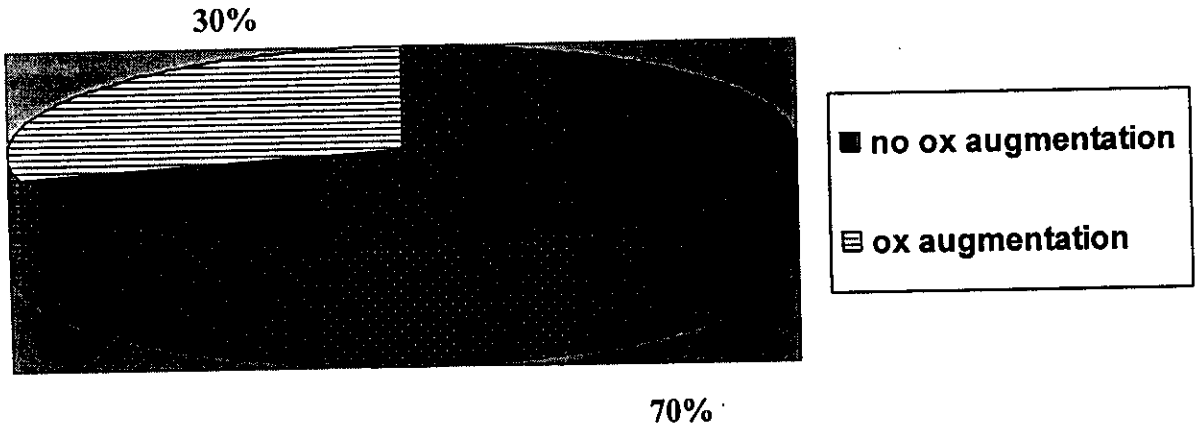
Oxytocin to delivery interval was shorter in vaginal misoprostol in 2.75 ± 0.899 hours than that in oral misoprostol group 4.40 ± 4.03 hours with P > 0.05 does not reach statistical significant difference.

Table (11): Comparison of vaginal group and oral group for oxytocin need

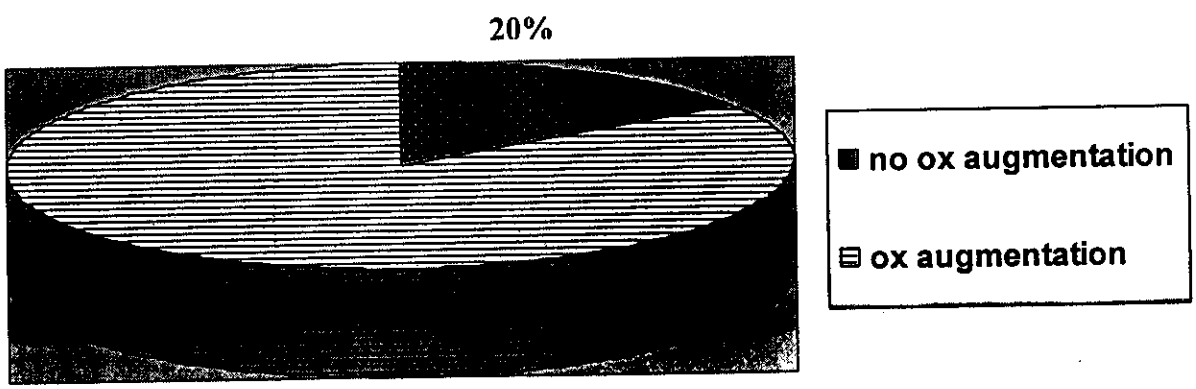
	Vaginal	**Oral**
Oxytocin augmentation	3	16
No oxytocin augmentation	7	4

$X^2 - 6.70$ $P < 0.01$

Using Chi-square test there was significant statistical difference for oxytocin augmentation between vaginal misoprostal 30% and oral misoprstol 80% with chi-square = 6.70 P < 0.01



Group I
Vaginal misoprostol



Group II
Oral misoprostol

Fig (4): Need for oxytocin in the studied groups

Table (12): Comparison of vaginal group and oral group for route of delivery:

Route of delivery	vaginal misoprostol	oral misoprostol	P	Sign
Vaginal	8 (80%)	15 (75%)	> 0.05	**N.S**
Spontaneous	7 (70%)	12 (60%)	> 0.05	N.S
Assisted vaginal	1 (10%)	3 (15%)	> 0.05	N.S
C.S	2 (20%)	5 (25%)	> 0.05	**N.S**
Indications of C.S				
Poor progress	1 (10%)	2 (10%)		
Fetal destress	1 (10%)	3 (15%)		

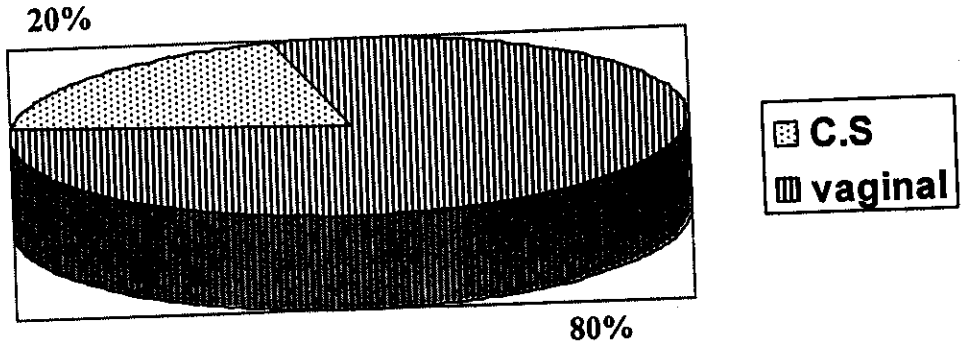
$X^2 = 0.30$ P > 0.05 N.S

Table (12) shows that there were 15 patients achieved vaginal delivery in oral misoprostol (75%) 12 of them (60%) were spontaneously delivered and 3 (15%) assisted by vaccum extraction mainly due to malposition 8 patient in vaginal misoprostol group 80% achieved vaginal delivery one of them (10%) was assisted by vaccum extraction and the rest 7 (70%) were spontaneously delivered.

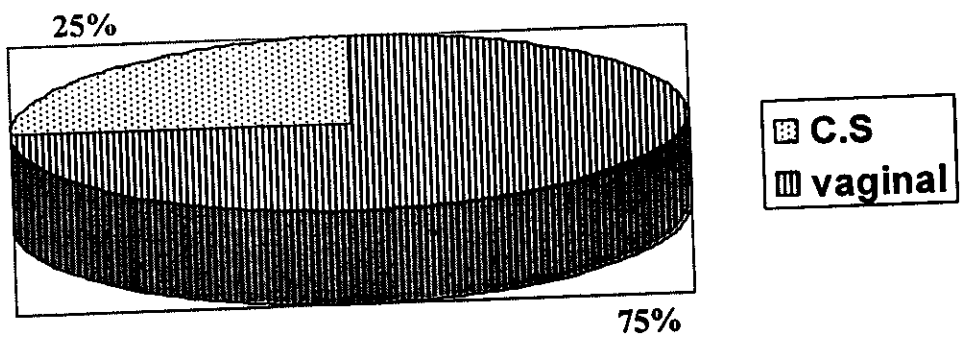
5 patient (25%) of oral misoprostol group delivered by C.S with a higher rate than that in vaginal misoprostol group 2 (20%) but stastistically insignificant.

Two cases in oral misoprostol (10%) delivered by C.S due to poor progress and the rest 3 (15%) due to fetal distress.

While one case (10%) vaginal misoprostol group delivered by C.S due to poor progress and one case (10%) due to fetal distress.



Group I
Vaginal misoprostol



Group II
Oral misoprostol

Fig (5): Vaginal delivery (success rate) in the studied groups

Table (13): Neonatal outcome and intrapartum fetal complications.

	Vaginal misoprostol	Oral misoprostol	T	p
Birth weight (kg)	3.48±0.09	3.43±0.32	0.41	N.S
Apgar score				
1 min	7.5±0.97	7.2±0.62	1.034	NS
5 min	9.4±0.51	9.15±0.67	1.032	NS
Admission to NICU	2 (20%)	2 (10%)		NS
Bradycardia	3 (30%)	4 (20%)		NS
Meconium passage	2 (20%)	2 (10%)		NS

There were no significant statistical difference between vaginal misoprostol and oral misoprostol group as regards birth weight, apgar score (1 min and 5 min), admission to NICU (inspite of higher rate in vaginal misoprostol group) intrapartum fetal bradycardia and meconium passage.

Table (14): Maternal complications in vaginal group and oral group:

	Vaginal misoprostol	**Oral misoprostol**
Maternal compilations	3 (30%)	2 (10%)
Hyperstimulation	1 (10%)	-
Nausea and vomiting	2 (20%)	2 (10%)
Traumatic post parum hemorrhage	1 (10%)	

This table shows that the maternal complications was higher in vaginal misoprostol group 3 cases = 30% than that in oral misoprostol group 2 cases = 10%. This difference between both group was statistically non significant.

There was a single case in vaginal misoprostol group who developed a serious complication which was post partum haemorrhage due to extended cervical tear due to hyperstimulation.

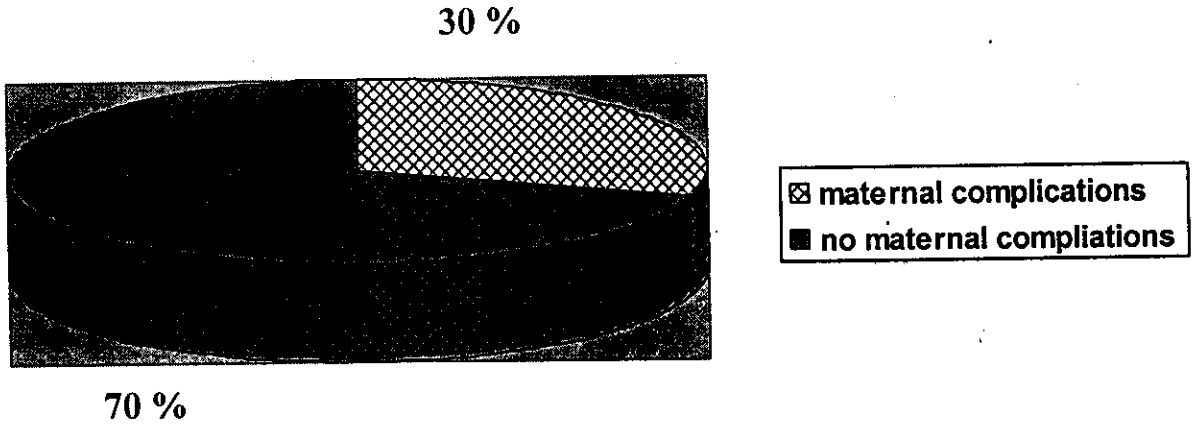


Fig (6): Maternal complications in the studied groups.

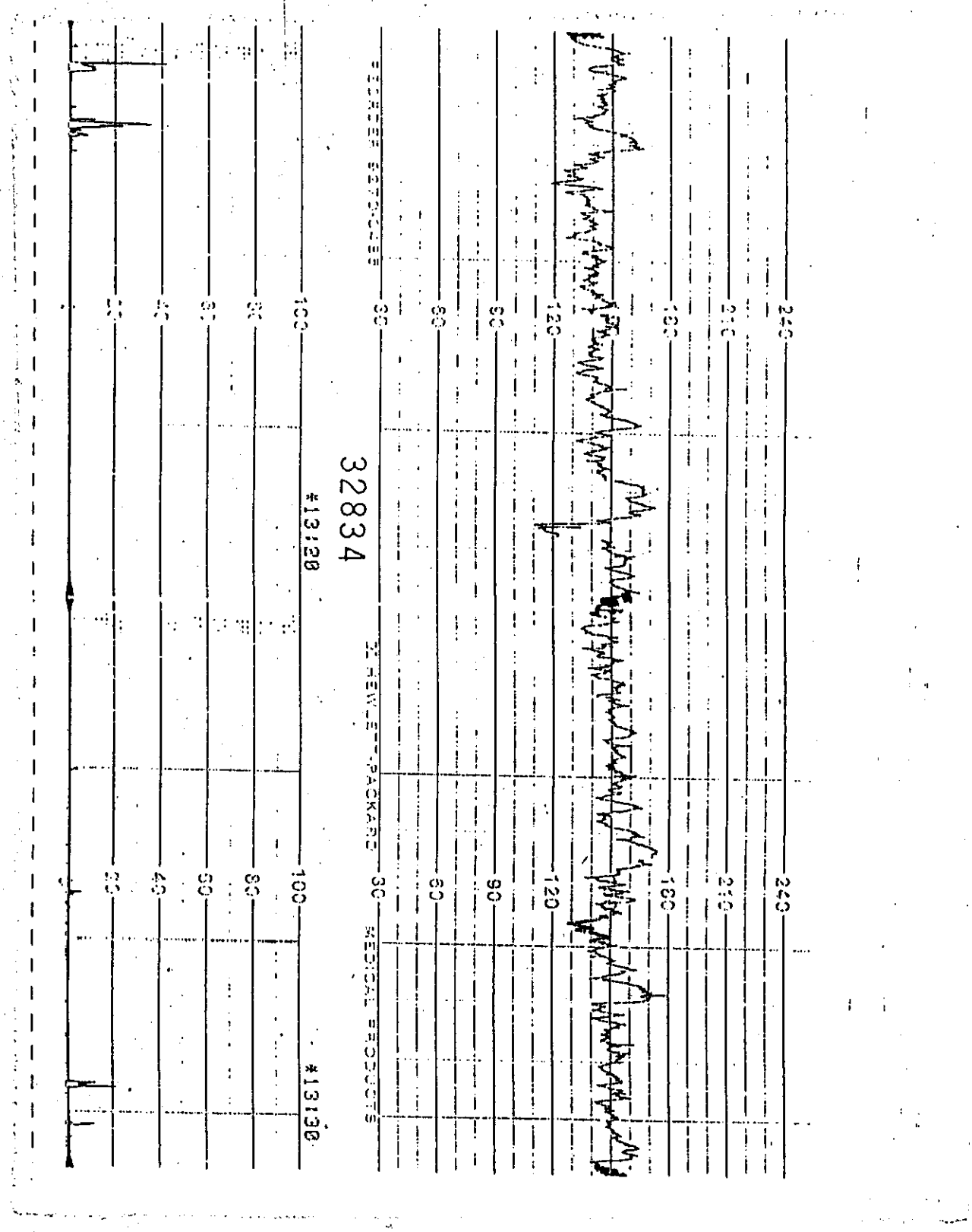


Fig (7) FHR monitoring showing reactive NST

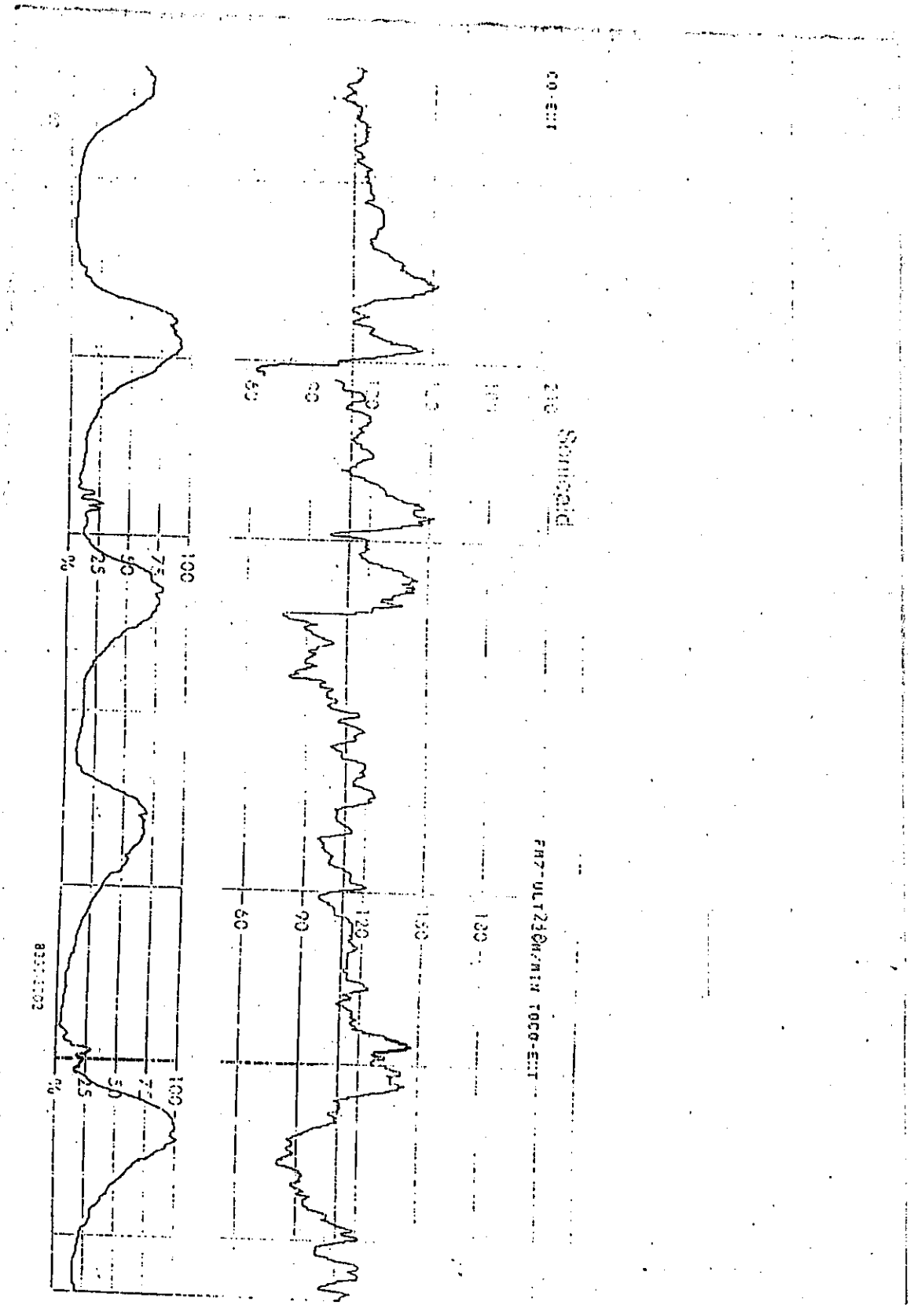


Fig (8) CTG monitoring showing early deceleration.

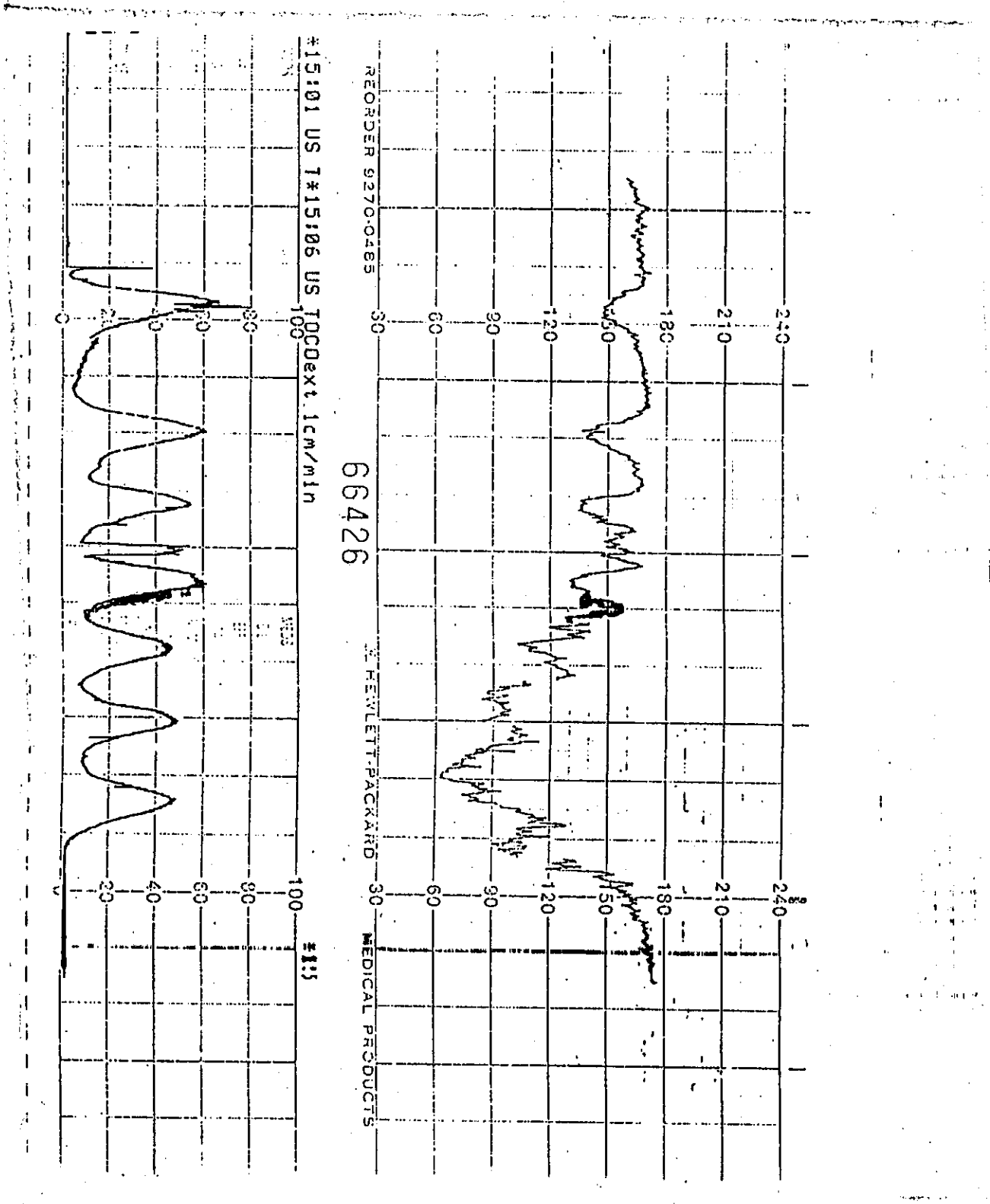


Fig (9) CTG monitoring showing hyperstimulation (>6 uterine contractions in 10 minutes + FHR changes).

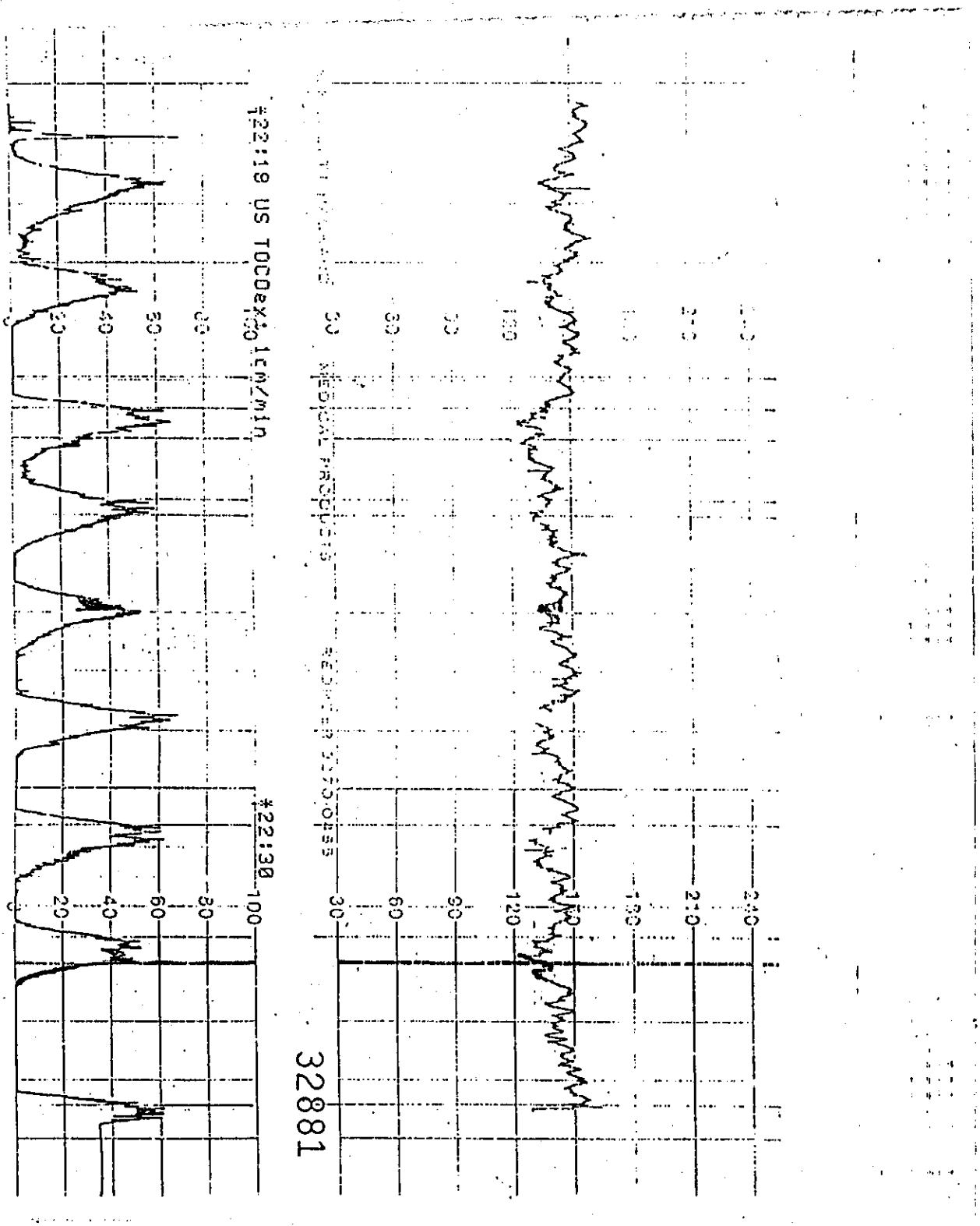


Fig (10) CTG mornitoring show tachysystol.