CONSERVATIVE MANAGEMENT OF SPONTANEOUS MISCARRIAGE

Kamal I. Shehata

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Table (1) Incidence, Gestational Age, Pregnancy Loss in Previous Ultrasonic Studies

Authors	Indication	Number	Gestational Age	Pregnancy Failure	
Pandya et al (1996)	Routine*	17 870	10 -13	501	2.8%
Goldstein (1994)	Routine*	232	5 - 10	27	11.5%
Frates et al (1993)	Routine*	556	6 - 13	52	9.4%
Barrett and Brinson (1991)	Routine	737	6 - 13	56	7.6%
Merchier et al (1991)	Routine	157	5 - 12	16	9%
Achrion et al (1991)	Routine*	603	5.5- 11	23	3.8%
Regan et al (1989)	Routine	383	8 - 12	24	6.3%
Stabile et al (1987)	Bleeding	406	5 - 16	101	24.9%
Lind and McFayden (1986)	Routine*	961	7 - 12	32	3.3%
Gilmore and MacNay (1985)	Routine	2139	< 11	179	8.4%
Mantoni (1985)	Bleeding	214	5 - 14	76	35.5%
Simpson (1984)	Routine	220	> 8	7	3.2%
Whittaker et al (1983)	Routine *	85	> 5	11	13 %
Edmonds et al (1982)	Routine *	51	> 5	6	12 %
Miller et al (1980)	Routine*	102	> 5	14	14 %
Jorgenson et al (1980)	Bleeding	191	9 - 16	101	52.9%
Robinson (1975)	Bleeding	425	6 - 14	138	32.5%
Total		25332		1364	5.4%

* Mixture of symptomatic and asymptomatic cases.

- The numbers included in these studies varied between 51 – 17 870, the gestational age between 5 – 16 weeks of gestation and the incidence of pregnancy failure between 2.8% - 52.9% with an average incidence of pregnancy failure of 5.4%.
- The incidence reported was higher in the studies where the studied groups represented with history of vaginal bleeding than when scanned at the dating scan.

Table (2) The Impact of Maternal Age on the Incidence of Pregnancy Loss

Table (2.1) Pregnancy Loss among Women < 35 Years of Age

Author	No. Patients	Pregnancy Failure	Percentage
Smith et al (1996)	139	3	2.15%
Goldstein (1994)	161	18	11.1%
Wilson et al (1986)	602	11	1.8%
Pandya et al (1996)	9960	224	2.3%
Total	10862	256	2.35% (CI 2% - 2.63%)

Table (2.2) Pregnancy Loss among Women of 35 - 39 Years of Age

Author	No. Patients	Pregnancy Failure	Percentage
Smith et al (1996)	47	7	14.9%
Wilson et al (1986)	129	6	4.3%
Pandya et al (1996)	6569	201	3.1%
Total	6745	214	3.17% (CI 2.75%- 3.59%)

Table (2.3) Pregnancy loss among women > 40 Years of Age

Author	No. Patients	Pregnancy Failure	Percentage
Smith et al (1996)	15	3	20%
Wilson et al (1986)	16	0	0%
Pandya et al (1996)	1341	76	5.7%
Total	1372	79	5.75% (CI 4.33%-6.99%)

Table (3) The Incidence of Pregnancy Loss in Symptomatic and Asmptomatic Pregnancies

Author	No. of Patients	Overall loss	Symptomatic	Asymptomatic loss
Benson et al (1997)	4156	8.9%	22.5%	12.6%
Pandya et al (1996)	17 870	2.8%	17.55%	5.5%
Frates et al (1993)	510	9.4%	10.6%	9.1%
Levi et al (1990)	46	23.9%	73%	33%
Cashner et al (1987)	489	2%	20%	10%
Wilson et al (1986)	730	2.3%	27%	5.4%
Hill et al (1986)	347	4.2%	18%	12.7%

Table (4) A Review of the Publications Describing Different Ultrasound Criteria Used for the Diagnosis of Incomplete/Complete Miscarriage

Authors	Type of Scan	Description of incomplete/complete miscarriage
Jeong et al (1981)	Transabdominal	Incomplete miscarriage: Central cavity echo
Stabile et al (1987)	Transabdominal	Incomplete miscarriage: Thick irregular echoes in the uterine cavity
Ben-Baruch et al (1991)	Not specified	Empty uterine cavity: No residual tissue.
Rulin et al (1992)	Abdominal/Vaginal ultrasound	Incomplete miscarriage: Echoes consistent with intrauterine tissues or clots or an endometrial layer > 10mm in thickness represent retained products of conception.
Mansur (1992)	Transabdominal	Empty uterine cavity: Curved curvilinear line that is un-interrupted from fundus to isthmus in absence of clinical symptoms (vaginal bleeding) Incomplete miscarriage: Endometrial lining is not present and the cavity is filled with all or part of gestational sac and pieces of placenta (echogenic) and/or blood clots (echolucent). The endometrial lining may be partly present but is interrupted by pieces of placenta and/or blood clots.
Haines et al (1994)	Transvaginal	Women with a choriodecidual reaction measuring < 5 cm^2 in transverse diameter and < 6 cm^2 in the sagittal plane were considered to have an empty uterus.
Nielsen et al (1995)	Transvaginal	AP diameter more than 15 mm was considered as incomplete miscarriage.
Chipchase et al (1997)	Transvaginal	AP diameter equal to or more than 5 mm was considered as incomplete miscarriage.
Jurkovic et al (1998)	Not reported	AP diameter > 10 mm considered as incomplete miscarriage.
Schwärzler et al (1999)	Transvaginal	AP diameter > 10 mm considered as incomplete miscarriage
Sairam et al (2001)	Not specified	Endometrial thickness >5mm with loss of midline echo suggestive of retained products of conception.

Table (5) Medical treatment of spontaneous miscarriage complicated by incomplete miscarriage.

Author(s)	Participants	Intervention	Success Rate	Medical Regime	Other Outcome Measures	Authors' Comment
Pandian et al (2001)	112 women with incomplete miscarriage between 6 – 13 weeks of gestation received medical management.	Retrospective analysis where the diagnosis of incomplete miscarriage was made either on ultrasound or clinical findings.	85% incidence of complete miscarriage with 15% requiring surgical evacuation.	Three sequential oral doses of misoprostol; 600 µg followed by two further doses of 400 µg at two hourly intervals.	Five women were readmitted (4%): Three with suspected pelvic infection, one with molar pregnancy and one underwent a diagnostic laparoscopy to exclude ectopic pregnancy. One woman had a blood loss >500mls. 85% received analgesia; 2% received parental opiates.	They concluded that the 3 sequential doses of misoprostol appear to be effective in terms of high rate of complete miscarriage and it is safe.
Pang et al (2001)	201 women were randomised to receive 800 µg of misoprostol either orally or vaginally	Randomised controlled trial comparing oral with vaginal misoprostol for medical evacuation.	61.1% for women received oral misoprostol and 64.4% for those received vaginal misoprostol.	800 µg of misoprostol administered either orally or vaginally, which was repeated if necessary.	Higher incidence of diarrhea with the oral route 65.3% as compared to 13.6% with the vaginal route.	Vaginal misoprostol was as effective as oral misoprostol for the management of women with incomplete miscarriage. There was also a reduction in the incidence of diarrhoea with the use of vaginal misoprostol.

Author(s)	Participants	Intervention	Success Rate	Medical Regime	Other Outcome Measures	Authors' Comment
Chung et al (1999)	635 women were managed either medically (n = 321) or surgically (n = 314). Gestational age was [10.7 (SD 2.5) weeks] for the former and [10.8 (SD 2.6) weeks] for the latter.	Randomised study to assess efficacy and the incidence of complications [immediate, short term (within 2 - 3 weeks) and medium term (within 6 months)] between the 2 managements	50.3% of the women in medical group required no curettage. Complications were less in the medical group.	Misoprostol 400μg orally given every 4 hours for a total of 1,200μg.	Surgical management has higher rate of short-term complications (P = 0.04) and major medium-term complications (1.6% re-evacuation and 4% antibiotic treatment) when compared to medical management.	Treatment with misoprostol can reduce surgical uterine evacuation in cases of spontaneous miscarriage and is associated with fewer side effects and complications.
Chung et al (1997)	214 women with incomplete miscarriage were given oral misoprostol for 48 hours. A reference group of 137 women had suction evacuation.	Prospective study where TVS was used to establish the diagnosis.	69% success rate among medically treated women.	Oral misoprostol was given in a dose of 400μg up to a total dose of 1,200μg per day for two days.	27.1% from the misoprostol group required analgesia compared to only 0.7% from surgical group; 0.8% of misoprostol group had †PID compared to 3.6% from the surgical group.	48 hours regimen of misoprostol can reduce the need for surgical intervention in 70% of women with incomplete miscarriage with law morbidity.

Author(s)	Participants	Intervention	Success Rate	Medical Regime	Other Outcome Measures	Authors' Comment
De Jonge et al (1995)	50 women with incomplete miscarriage who had 80 days of amenorrhoea treated either medically (n = 23) or by suction evacuation (n = 27)	Randomised study and surgical evacuation was carried out 12 hours after Misoprostol administration.	13.0% success rate for women received medical treatment.	A single oral dose of Misoprostol (400μg) to be followed by surgical uterine evacuation 12 – 17 hours later if miscarriage not completed	Significant drop of Hb occurred in misoprostol group. 26% from misoprostol group and 23% from surgical group required >1 unit of blood transfusion.	Results could not confirm the efficacy of a single dose of oral misoprostol 400μg in completing the expulsion of the retained products of conception.
Chung et al (1995)	141 women with incomplete miscarriage and a gestational age of 9 (6 - 18) weeks were given misoprostol.	A prospective observational study.	62% success rate following medical management.	Misoprostol 400μg orally every 4 hours for a total of 1,200μg.	Two women complained of nausea and vomiting, 5 of diarrhoea, 3 of headaches, one felt dizzy and 13 women developed transient pyrexia (> 37.5°C and one developed hypotension.	Appropriate randomised studies of sufficient size are required to test this new strategy of managing women with spontaneous miscarriage.

Author(s)	Participants	Intervention	Success Rate	Medical Regime	Other Outcome Measures	Authors' Comment
Chung et al (1994)	132 women with retained products of conception managed by medical treatment with gestational age at presentation of 9.4 (6 – 18) weeks.	A prospective trial to evaluate the efficacy of medical evacuation of the uterus using prostaglandins.	44% success rate with medical treatment.	Gemeprost vaginal pessary (up to 5mg total)	Side effects related to gemeprost were nausea (17.4%), diarrhoea (11.5%) abdominal pain (24.2%) drowsiness (0.7%) and postural hypotension (1.4%).	A prospective randomised study examining the complications between the routine surgical approach and medical management would be necessary.
Henshaw et al (1993)	43 women with incomplete or inevitable miscarriage who had a median duration of amenorrhoea of 66 (40-91) days.	Prospective study of medical management based on pelvic and ultrasound examination.	95.3% success rate and two women had failed.	Single dose of 0.5mg sulprostone intramuscularly or misoprostol 400μg orally.	29.5% required analgesia	Medical management has the potential of resolving women dissatisfaction with the standard management and the potential of having beneficial implications on economic resources.

*TVS = Transvaginal scan
†PID = Pelvic Inflammatory Disease

Table (6) Studies for the Use of Prostaglandin Analogues, Mifepristone and/or a Combination of Them for Management of Cases of Missed Abortion.

Author(s)	Participants	Intervention	Regimen	Side Effects	Success Rate	Authors' Comment
Wagaarachchi et al. (2002)	56 consecutive women with nonviable pregnancy received medical management. The mean gestation at diagnosis was 9.6 weeks (1.84).	Prospective observational study, 66.1% were asymptomatic at presentation.	Mifepristone 200 mg orally, followed 36-48 hours later by 400 µg of misoprostol sublingually and by a further 2 doses (400 µg each) sublingually every 3 hours.	82.1% required analgesia, 32.1% required parental analgesia and 50% only oral analgesia. 64.3% were satisfied with sublingual medical treatment. Two women (3.6%) required admission; one for prolonged bleeding and one for pelvic infection. 50% had diarrhoea (mild in 2/3).	83.9% had complete miscarriage, 4 women following mifepristone only and 43 women following misoprostol.	Sublingual misoprostol in combination with mifepristone is an effective and safe alternative to vaginal or oral misoprostol in management of early fetal demise.
Demetroulis et al (2001)	80 women with either incomplete or nonviable miscarriage randomised to receive either medical management (n = 40) or surgical evacuation (n = 40)	Prospective randomised trial with 85% power to compare between surgical evacuation and the use of a single dose of 800 µg of vaginal misoprostol.	800 µg of misoprostol vaginally	No patients from either groups required emergency evacuation, antibiotics, oxytocin or blood transfusion. The duration of pain was longer in women received medical management. However they required less analgesia than the surgical evacuation group. The drop in Hb was comparable between the two groups.	82.5% for medical management; 94% for incomplete miscarriage and 77% for nonviable pregnancy.	This study demonstrated efficacy and safety of administration of 800 µg of misoprostol vaginally for management of early pregnancy failure. 82.5% were satisfied v. 58% from ERPC group.

Author(s)	Participants	Intervention	Regimen	Side Effects	Success Rate	Authors' Comment
Wagaarachchi et al (2001)	220 consecutive women with nonviable pregnancy were treated by a combination of mifepristone and misoprostol	Prospective observational study and women failed the medical treatment were offered either surgical evacuation or repeat medical management.	A single oral dose of mifepristone 200 mg followed by 36-48 h later by vaginal misoprostol 800µg followed 3 hours later by 2 further doses of misoprostol 400 µg given vaginally or orally (3 hourly).	The incidence of pain was 63.5% with 17.4% requiring parental analgesia. Readmission rate was 6.3%, 1.8% with presumed pelvic infection, 2.2% required surgical evacuation for prolonged bleeding, 0.5% had molar pregnancy.	84.1% success rate (18.1% followed mifepristone only and the rest following misoprostol).	The combination of mifepristone 200 mg with vaginal or oral misoprostol is an alternative to surgical management of early fetal demise.
Nielsen et al (1999)	62 women managed expectantly and 60 women managed medically (<13 weeks of gestation) for non-viable pregnancy with symptoms of bleeding and /or pain.	Randomised controlled study with follow-up period of 5 days and gestational ages were 68 (SD 11) and 67 (SD 11) days for medically and expectantly managed groups respectively.	400 mg RU 486 orally + Misoprostol. 400µg orally .	66% had pain with medical management as compared to 62% in women managed conservatively	82% with medical management and 76% with expectant management	Outpatient treatment with combination of antiprogesterone and PGE1 analogue did not increase the rate of complete miscarriage compared to expectancy alone by a clinically impressive degree.

Author(s)	Participants	Intervention	Regimen	Side Effects	Success Rate	Authors' Comment
Creinin et al (1997)	20 women with early pregnancy failure were given either oral or vaginal misoprostol. The average gestational age was 8 weeks or less.	Randomised study and women were considered to have failed if did not pass products of conception within 48 hours.	Misoprostol. 400μg orally/ day for 2 days Misoprostol 800μg vaginally/day for 2 days	30% vomiting, 50% diarrhoea 13% vomiting, 38% diarrhoea	25% with oral route 88% with vaginal route	Vaginal misoprostol 800 μg is more effective than oral misoprostol of 400 μg for uterine evacuation of early pregnancy failure and may be an effective alternative to surgery.
Herabutya et al (1997)	84 women with missed abortion managed either medically (n = 42) by prostaglandins or given placebo (n = 42). Gestational ages were 12.6 (SD 3) and 14 (SD 4) for medical and placebo groups respectively.	Randomised controlled trial of medical treatment v. placebo prior to evacuation of retained products of conception.	Misoprostol 200μg vaginally	Two women had intramuscular pethedine for pain	83.3% for PG group and 17% for the placebo group	Vaginal administration of misoprostol group to women with a missed abortion reduced the need for surgical treatment.

Author(s)	Participants	Intervention	Regimen	Side Effects	Success Rate	Authors' Comment
Nielsen et al (1997)	Women with missed abortion with anteroposterior diameter of 15 - 50 mm.	Prospective study and Gestational ages were 77 (SD 12) in successful group compared to 70 (SD 13) in the unsuccessful.	400 mg Mifepristone orally + Misoprostol 400μg vaginally	Two women had severe pain, 2 women had severe bleeding and one woman developed pelvic infection.	52%	The results do not support the use of mifepristone and misoprostol for women wishing the miscarriage to be resolved quickly.
Egarter et al (1995)	87 women of gestational age of 10.1 (8 – 12) weeks in average, with missed abortion managed either medically (n = 43) or by surgical uterine evacuation (n = 44).	Women were randomly assigned to treatment options. Women considered failed their medical management if they did not pass products of conception after 48 hours.	Gemeprost 1 mg vaginally/3h maximum 3mg per day)	60% required Analgesia	76.7%	This study demonstrated the feasibility of management of missed abortion medically without resort to surgical uterine evacuation. Women's perception was positive.

Author(s)	Participants	Intervention	Regimen	Side Effects	Success Rate	Authors' Comment
Lalaider et al (1993)	46 women with 11 weeks of amenorrhoea (6.6 - 14 weeks of gestation) were found at ultrasound examination to suffer from non-viable pregnancy with no clinical signs of miscarriage.	Randomised double-blind study assessing occurrence of natural expulsion, frequency of complete expulsion, need for ERPC, analgesia and blood transfusion.	Mifepristone 600 mg orally	4% endometritis 2 haemorrhagic expulsion managed by surgical uterine evacuation.	82% in medically managed group 8% in placebo	A standard oral pilot dose of 600mg mifepristone induces natural expulsion in 82% of women with non-developing 1st trimester intrauterine pregnancy.
El-Rafaey et al (1992)	59 women with missed miscarriage and an average gestational age of 71 (42 -110) days were given misoprostol.	Prospective descriptive study where success was defined as expulsion of POC within 4 hours from misoprostol or resolution of gestational sac.	Mifepristone 600mg (400+200) orally, Misoprostol. 600μg x 2.	Five were given Antiemetic, seven had diarrhoea 13 received oral analgesia and 7 had parental analgesia. Duration of bleeding varied between 2 – 22 days.	93%	This study demonstrated the feasibility of medical management. Women's perception at this early stage of development of the medical management was positive.

Table (7) Studies of expectant management concerning immediate and short term outcomes

Author(s)	Participants	Intervention	Success Rate	Authors' Comment
Luise et al (2002)	686 women with incomplete or missed miscarriage in the first trimester were managed either expectantly (n = 478) or by surgical evacuation based on women's choice of the type of the management offered.	Prospective observational study, where women were allocated according to their choice to either a conservative approach or surgical evacuation of retained products of conception. Complete miscarriage was diagnosed following expectant management if endometrial thickness was <15mm in absence of vaginal bleeding.	70% of women managed expectantly completed their miscarriage within 14 days of classification (84% for incomplete miscarriage and 52% for missed miscarriage). A total successful outcome was seen in 81% after 4 weeks of expectant management (91% for incomplete miscarriage and 76% for missed miscarriage)	Most women with retained products of conception chose expectant management. They also commented that by the use transvaginal ultrasound women can be advised of the likelihood that their miscarriage will complete spontaneously within given periods of time.
Sairam et al (2001)	545 women with incomplete or missed miscarriage were managed either expectantly (221 with incomplete miscarriage and 84 with missed miscarriage) or by surgical evacuation (77 incomplete miscarriage and 163 missed miscarriage).	Observational study based on women's choice of the type of management offered. Gestational age varied between 7 – 14 weeks of gestation. The gestational age for the conservative management group was 8.9 (2.2) weeks and 9.9 weeks for the surgical evacuation group.	86% after 2 weeks of expectant management (96% for women with incomplete miscarriage and 62% for women with missed miscarriage)	This study demonstrates that early pregnancy failure can be safely managed expectantly. Ultrasound has an invaluable role in predicting the likelihood of successful expectant management enabling patients to make an informed choice.

Author(s)	Participants	Intervention	Success Rate	Authors' Comment
Schwarzler et al (1999)	107 women with non-viable pregnancy in the first trimester were managed either conservatively (n = 84) or by surgical uterine evacuation (n = 23)	Prospective descriptive study based on women's choice for the type of management offered. Women managed conservatively were followed up to four weeks from recruitment.	84% success rate for the women in conservative group.	Conservative management is a successful approach for many women with first trimester miscarriage. Colour Doppler can be used to select women suitable for conservative management.
Jurkovic et al (1998)	221 women with non-viable pregnancy in the first trimester were managed either conservatively (n = 85) or surgically (n = 136).	Prospective descriptive study based on women's choice for the type of management offered with no limit on the length of the expectancy period used for the conservatively managed group.	25% success rate in the conservative group with 17% had incomplete miscarriage. Two women out of 199 women managed by surgical uterine evacuation required a repeat procedure.	Success of expectant management of non-viable pregnancy is too low to justify its use in routine clinical practice.
Hurd et al (1997)	152 women with early pregnancy failure who were managed either conservatively (n = 105) or by surgical uterine evacuation (n = 47).	Historic cohort study and pregnancies were divided into those with significant tissues (intrauterine gestational sac > 10 mm) and those having minimal intrauterine tissues.	91% in all women managed expectantly had no complications compared to 98% in the surgical group.	Women with non-viable pregnancy and minimal intrauterine tissues can be expectantly managed. In women with significant intrauterine tissues elective curettage can reduce the incidence of complications.

Chipchase and James (1997)	Women with retained products of conception after spontaneous miscarriage (less than 13 weeks of gestation) were randomised to expectant (n = 19) management or surgical (n = 16) management.	Randomised study of women with retained products of conception (of < 50mm) and the outcome measures were pain, duration of bleeding, sick leave, the return of menses and future reproductive performance.	95% conservatively managed had no complications, compared to 94% of women managed surgically. 100% of women in the former group were satisfied with their management compared to 88% of women in the latter group.	Conservative management is safe both in the short and medium term with regard to the number of days of pain, bleeding, sick leave, or return to normal periods or future conception rate.
Chung et al (1997)	101 women with empty uterus following early pregnancy failure were managed expectantly	Prospective observational approach as part of a study including medical management. Diagnosis and follow-up were made by using TVS	99% success rate.	The use of ultrasonography in avoiding routine surgical intervention has been successful in women with empty uterus following early pregnancy failure.
Kaplan et al (1996)	172 women with complete miscarriage were managed conservatively and followed up for their reproductive performance. Women were <8 weeks of gestation (average 5.8 weeks) and endometrial thickness <20mm with decreasing levels of HCG.	Prospective study with weekly follow-up visits until HCG serum levels were less than 5 iu/ml and bleeding stopping. Expectantly managed group had empty uterus initially diagnosed by TVS.	97% did not require surgical intervention. Five women required uterine curettage and one woman required hospitalisation for excessive vaginal bleeding.	It is possible to avoid curettage in the management of complete miscarriage < 8 weeks of gestation.

Author(s)	Participants	Intervention	Success Rate	Authors' Comment
Nielsen and Hahlin (1995)	Women with either incomplete or inevitable miscarriage (less than 13 weeks of gestation and AP diameter between 15 - 50mm) were managed either conservatively (n = 103) or by surgical evacuation (n = 52)	Randomised controlled trial and the outcome measures were needed for surgical uterine evacuation, risk of genital tract infection, duration of bleeding, number of days of pain, sick leave and change in blood packed cell volume (PCV) on 3rd and 14th days.	79% achieved complete miscarriage in the conservative group. 3% of women from the conservative group compared to 11% from the surgical group developed pelvic inflammatory disease.	Expectant management of selected cases of spontaneous miscarriage has a similar outcome to surgical uterine evacuation.
Chung et al (1995)	96 women with spontaneous miscarriage with no products of conception seen on the scan were managed expectantly.	Prospective descriptive study (part of a study employing medical management and TVS)	97% of women encountered no complications with 3 women had pelvic infection	The incidence of complications was low even if uterine curettage was not performed
Chung et al (1994)	60 women with spontaneous miscarriage and no products of conception were seen on ultrasound scanning.	Expectantly treated group had initial TVS showing empty uterus.	88% success rate with 6 women had surgical uterine evacuation and one had documented pelvic infection.	Surgical uterine evacuation was unnecessary in the management of 56% of women with spontaneous miscarriage.

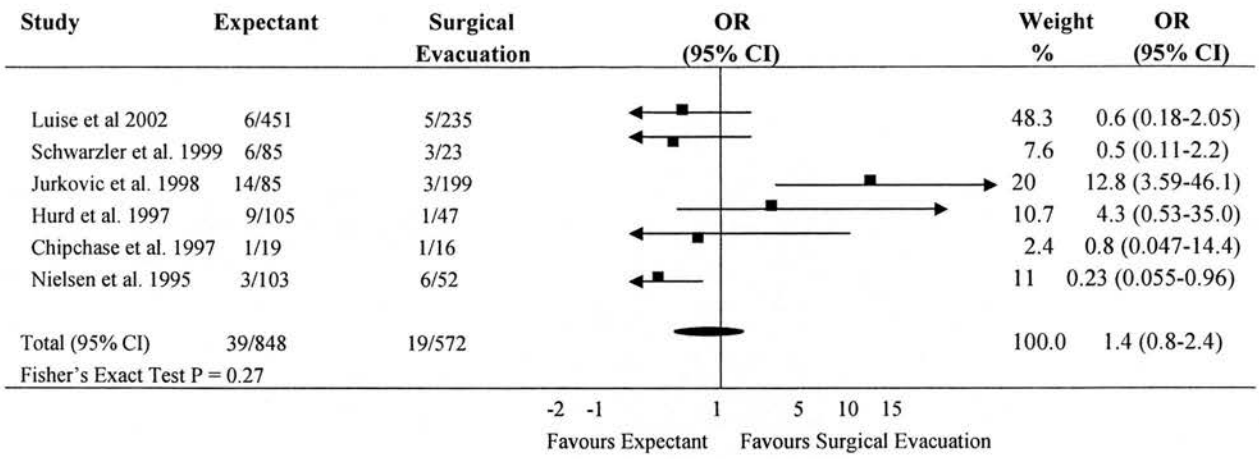
Author(s)	Participants	Intervention	Success Rate	Authors' Comment
Haines et al (1994)	50 women with the diagnosis of spontaneous miscarriage of whom 32 chosen for non-surgical treatment by the use of TVS. The sagittal and the transverse area of the endometrial lining were below 6 cm^2 and 5 cm^2 respectively with the use of TVS	Prospective study with follow-up arranged after one and two weeks. Follow-up was carried out weekly by telephone calls to inquire about cramps, bleeding, or fever and by a scheduled examination 3 weeks after the initial visit.	100% of women had their bleeding stopped within two weeks with no subsequent complications.	Sonographic examination by the use of TVS allows the selection of women with spontaneous miscarriage and an empty uterus to be safely managed conservatively.
Rulin et al (1992)	49 women with complete spontaneous miscarriage and endometrial thickness of < 10mm were managed expectantly.	Prospective study, where endometrial thickness of 10 mm was the cut off limit chosen to select women for either expectant or surgical management.	TVS has a 98% negative predictive value of chorionic villi and 69% positive predictive value.	Ultrasonography is a highly reliable test in the management of women thought to have complete spontaneous miscarriage.
Mansur, (1992)	Of 155 women with spontaneous miscarriage, 43 (28%) were complete and were followed expectantly.	Prospective study, expectant treatment group had empty uterus by initial TVS; length of gestation not entirely clear in some cases.	98% of the expectantly managed women did not require any further surgical intervention.	Ultrasound examination may be useful in identifying those women who had a complete miscarriage.

Author(s)	Participants	Intervention	Success Rate	Authors' Comment
Ben-Baruch et al (1991)	46 women were managed conservatively and 68 women were managed surgically and both groups were followed up with regard to their reproductive performance.	Expectant vs. surgical non-randomised study; type of treatment selected by attending physician; all women were < 10 weeks' gestation with hCG < 500 mIU/ml and empty uterus by TVS	100% success rate with no immediate complications in both groups.	Curettage offers no advantage over conservative management in selected women with early miscarriages.
Letterie et al (1991)	21 women with empty uterus following spontaneous miscarriage were managed conservatively	Women were diagnosed initially by TVS to be negative for POC; 85% of women cleared to normal levels of hCG by 30 days	95% of women had no complications (3 patients took 35, 49, and 97 days) to reach normal levels of hCG.	The use of scan can be helpful in avoiding uterine curettage in women with complete miscarriage.
Robinson et al (1972)	Of 53 women thought to have complete miscarriage, 25 women were found to have an empty uterus and were managed conservatively.	Descriptive study of women with empty or nearly empty uterus on ultrasonic examination and no significant bleeding were followed up expectantly.	80% in conservative group had empty uterus, negative predictive value for villi was 92% and Positive predictive value of 82%.	The number of unnecessary operations could be reduced by the increasing use of ultrasound as an aid to diagnosis.

TVS = Transvaginal Scanning

Comparison: Expectant vs Surgical Evacuation

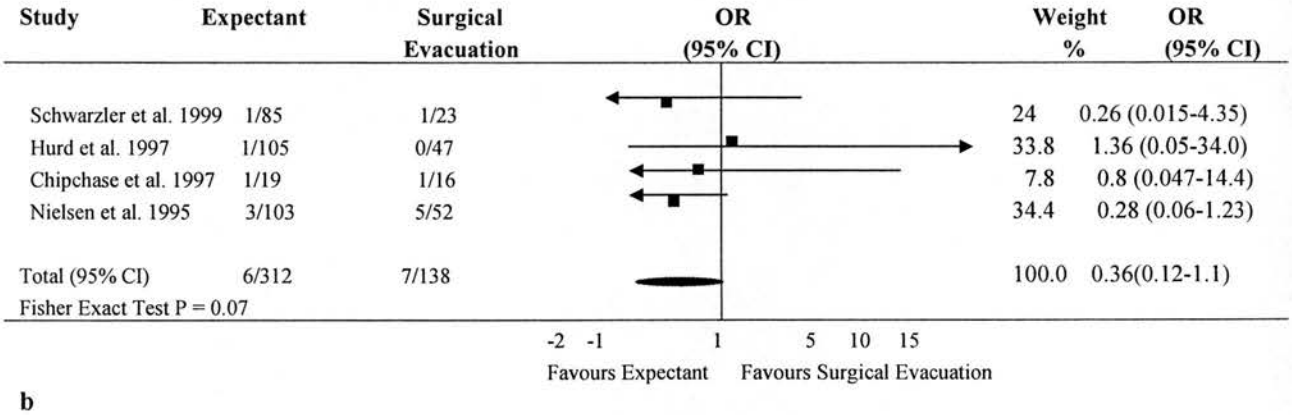
Outcome: Total incidence of different complications



a

Comparison: Expectant vs Surgical Evacuation

Outcome: Incidence of pelvic infection



b

Figure 1a-b The analysis of the overall incidence of complications showed similar incidence for women managed conservatively and those managed by surgical uterine evacuation (a). Women managed conservatively showed a trend towards lower incidence of pelvic infection when compared with women with surgical evacuation (b)

Table (8) Results of Expectant, Medical, and surgical Treatment of Spontaneous Miscarriage.

	Expectant		Medical		Surgical	
	Patients No.	Success %	Patients No.	Success %	Patients No.	Success %
Luise e al (2002)	451	81	-	-	208	99
Wagaarachchi et al (2002)	-	-	56	83.9	-	-
Sairam et al (2001)	305	86	-	-	-	-
Demetoulis et al (2001)*	-	-	40	82.5	40	100
Wagaarachchi et al (2001)	-	-	220	84.1	-	-
Pandian et al (2001)	-	-	118	85.0	-	-
Pang et al (2001)*	-	-	103	61.1	95	64.4
Nielsen et al (1999)*	62	76	60	82	-	-
Chung et al (1999)*	-	-	321	50.3	314	69
Schwarzler et al (1999)	84	84	-	-	23	87
Jurkovic et al (1998)	85	99.0	-	-	136	99.0
Chipchase & James (1997)*	19	95	-	-	16	94.0
Chung et al (1997)	-	-	214	69.0	137	93.4
Crenin et al (1997)‡	-	-	20	50.0	-	-
Kaplan et al (1996)	172	96.5	-	-	-	-
Chung et al (1995)	-	-	141	62.0	-	-
Nielsen et al (1995)*	103	76.7	-	-	52	89.0
Egarter et al (1995)*	-	-	43	76.7	44	100
de Yonge et al (1995)*	-	-	23	13	27	96
Chung et al (1994)	60	88.3	132	44	-	-
Haines et al (1994)	32	100	-	-	-	-
Rulin et al (1993)	49	98.0	-	-	-	-
Henshaw et al (1993)	-	-	43	95.3	-	-
Leliader et al (1993)	-	-	82	82.0	-	-
Verkuyl & Crowther (1993)†	-	-	-	-	270	95
Mansur (1992)	43	97.7	-	-	-	-
El-Rafaey et al (1992)	-	-	59	93.0	-	-
Ben-Baruch et al (1991)*	46	100	-	-	68	100
Leterie et al (1991)	21	95.2	-	-	-	-
Kizza & Rogo (1990)	-	-	-	-	585	92
Farrell et al (1982)	-	-	-	-	111	94
Marshall (1971)	-	-	-	-	86	88
Suter et al (1970)	-	-	-	-	104	94.2
Tan et al (1969)	-	-	-	-	89	98.9
Total	1532	87%	1675	68%	2405	90%

* Randomised controlled trials across treatment categories
† Randomised controlled trials comparing types of surgical treatment only
‡ Randomised controlled trials comparing between medical regimens

Table (9) Studies Concerned with Reproductive Performance Following Expectant Management of spontaneous Miscarriages

Author(s)	Population	Intervention	Success Rate	Authors' Comment
Blohm et at (1997)	113 women who desired to become pregnant with spontaneous miscarriage <13 weeks who were managed either expectantly (n = 76) or by surgical (n = 37) uterine evacuation in a previous randomised study (Nielsen et al. 1995).	Questionnaire were sent out to women 24 months after spontaneous miscarriage to collect information on their desire to become pregnant, months at risk of pregnancy, pregnancy rate and outcome.	The cumulative conception rates in women managed expectantly, women initially managed expectantly and later required surgical evacuation and women managed by surgical uterine evacuation from the beginning were 93%, 91% and 88% respectively.	No significant difference in pregnancy rates or in pregnancy outcome between the studied groups of women.
Chipchase and James (1997)	Women with retained products of conception after spontaneous miscarriage were randomised to either expectant (n = 19) management or surgical (n = 16) management.	Randomised study with the main outcome measures of pain, duration of bleeding, sick leave, the return to normal periods and future reproductive performance.	95% of women from the conservative group had no complications compared to 94% of women managed conservatively. Conception rates were 75% in the conservative group compared to 67% in the surgical group.	Expectant management of spontaneous miscarriage had no effect on future fertility.

Author(s)	Population	Intervention	Success Rate	Authors' Comment
Kaplan et al (1996)	161 women with complete miscarriage desired to become pregnant following conservative management of their complete miscarriage and were followed up.	Prospective descriptive study of women who initially had empty uterus by TVS; average gestational age was 5.8 (±0.7) weeks and only including women < 8 weeks from last menstrual period. Women were followed up for 18 months following their spontaneous miscarriage.	97% of all women studied did not require surgical intervention. 73% of all women studied desired to became pregnant within 18 months. 67.8% became pregnant within 6 months and 29.7% ended in miscarriage. The incidence of ectopic pregnancy was 1.7%.	Curettage can be avoided in women with complete miscarriage < 8 weeks of gestation with little or no effect on future fertility.
Ben-Baruch et al (1991)	Out of 46 women were managed conservatively and 68 women were managed surgically 35 and 52 respectively, who desired to become pregnant and were followed up with regard to their reproductive performance.	Expectant vs. surgical non-randomised study; type of treatment was selected by attending physician; all women were < 10 weeks' gestation with hCG < 500 mIU/ml and empty uterus by TVS. The median follow-up period after miscarriage was 28 months (12 - 68) months in the surgical group and 26 months (12 -72) in the conservative group. Previous history of infertility was high in the two groups 36.5% in the surgically treated group compared to 34.3% in the conservatively treated group)	100% no immediate complications in both groups. 75% and 74% conception rates for women previously managed surgically and conservatively respectively. The incidence of ectopic pregnancy was 3%.	Probability of subsequent pregnancy and rate of subsequent miscarriage were similar. Curettage offers no advantage over conservative management in selected women with early miscarriage.

TVS = transvaginal scanning

Fig.2 A Flow Diagram of Study Design

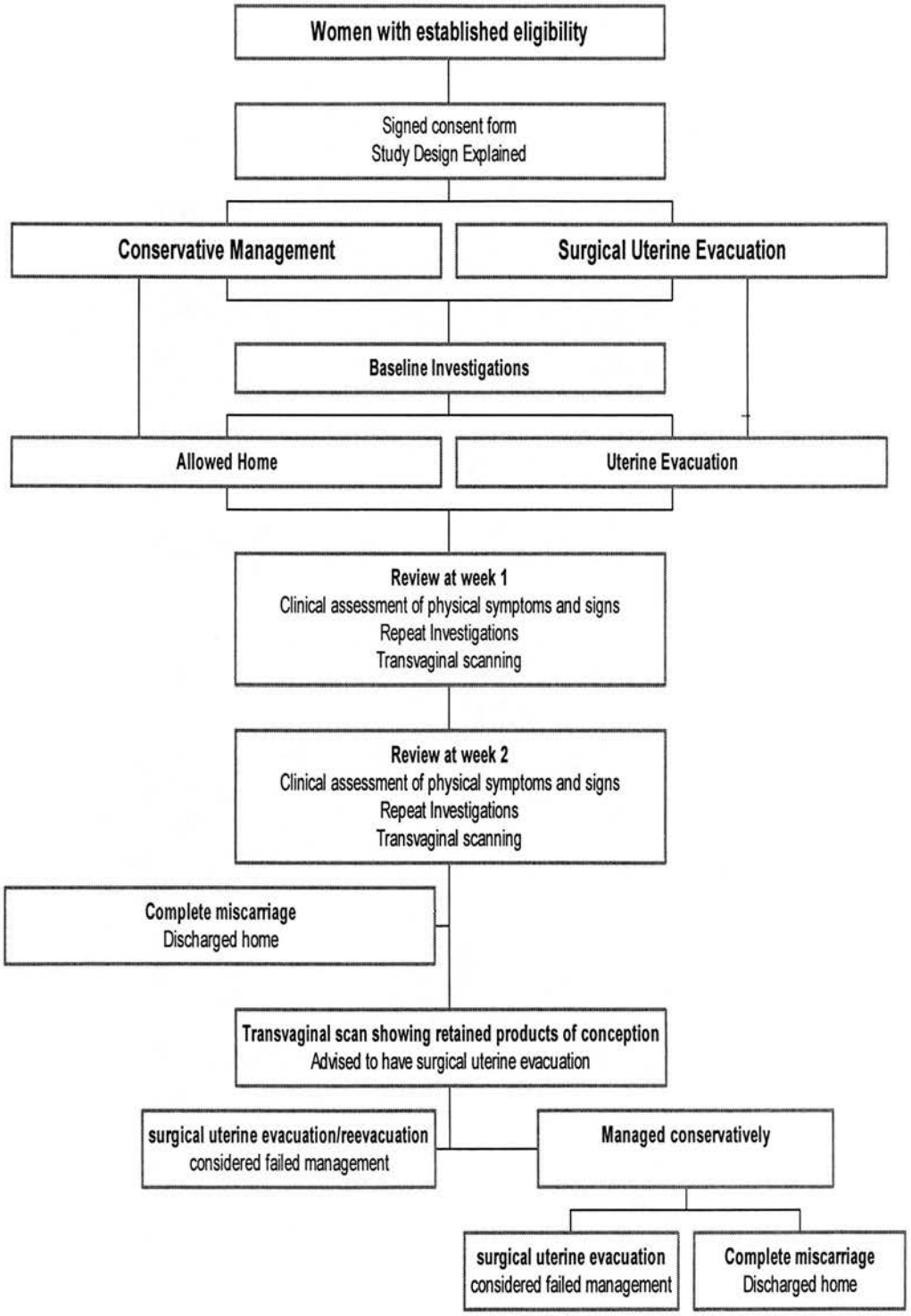


Table (10) Characteristics of women in randomised study groups at inclusion

	ERPC (n = 122)	Conservative (n = 161)
Age in years, mean (SD)	29 (6)	29 (7)
Parity, mean (SD)	1.7 (1)	1.7 (1)
Gestational age in days, median (Range)	73 (42 - 112)	72 (40 -131)
Maximum AP diameter in mm, median (Range)	27 (15 - 54)	24 (15 – 52)
*Volume of tissues in cc^3, median (Range)	17 (2.5 – 97.8)	15 (1.7 – 98.1)
*Gestational sac volume in cc^3, median (Range)	3 (0.05- 48.6)	3 (0.16 – 77.9)
Mean sac diameter in mm, median (Range)	22 (5 – 63)	19 (4 - 69)
Hb (g/l), mean (SD)	13 (1)	13 (1)
Hct (%), mean (SD)	39 (3)	39 (3)
Progesterone (nmol/l), median (Range)	19 (0.2 – 89)	15 (1 – 68)

*Volumes were measured using the following formula D1 x D2 x D3 x 0.523 (Rumack et al., 1998).
There was no significant difference between the two groups

Table (11) Characteristics of women in randomised and non-randomised groups.

	Randomised (n = 283)	Non-randomised (n = 85)
Age in years, mean (SD)	29 (6)	28.8 (6.6)
Parity, mean (SD)	1.7 (0.48)	1.7 (0.45)
Gestational age in days, mean (SD)	73 (13.7)	75 (12.8)
Maximum AP diameter in mm, mean (SD)	26.5 (9.4)	28.6 (9.8)
*Volume of tissues in cc^3	220 (93)	152 (16)
*Gestational sac volume in cc^3, mean (SEM)	38.8 (4.2)	44.7 (6.6)
Mean sac diameter in mm, mean (SM)	22.8 (0.77)	23.7 (1.2)
Hb (g/l), mean (SD)	13.1 (1)	13.1 (1)
Hct (%), mean (SD)	38.7 (3)	38.4 (3)

*Volumes were measured using the following formula D1 x D2 x D3 x 0.523 (Rumack et al., 1998).
There was no significant difference between the two groups

Figure 3. Cumulative Complete Miscarriage Rate in Women Managed Conservatively

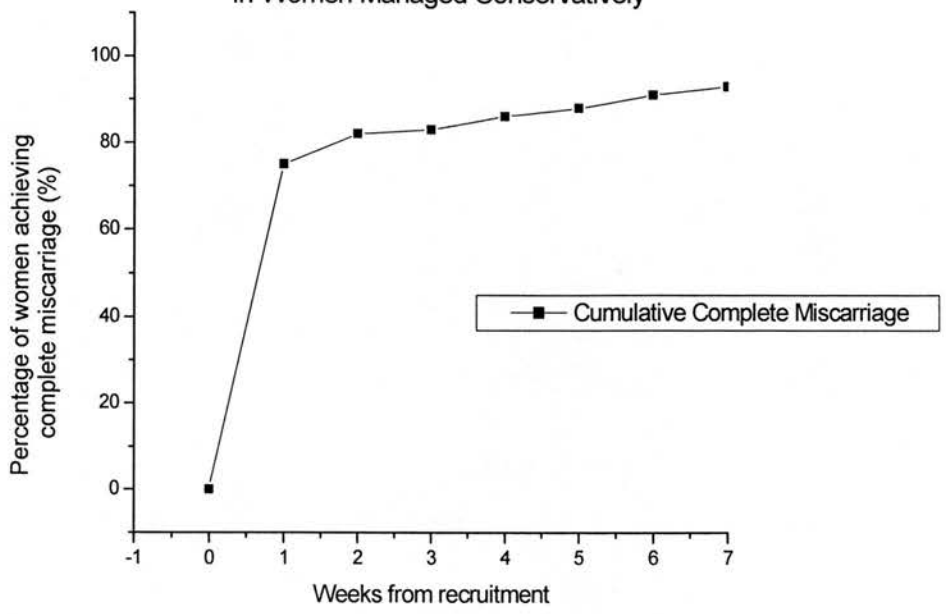


Table (12) Cumulative complete miscarriage rate in women randomised to conservative management

Number of weeks from recruitment	Number of women achieved complete miscarriage (n)	Number of women had Surgical evacuation (n)	Number of women remaining (n)	Cumulative Complete miscarriage rate (n, %)
First Week	121	1	39	121 (75%)
Second Week	11	2	26	132 (82%)
Third Week	2	3	21	134 (83%)
Fourth Week	4	1	16	138 (86%)
Fifth Week	4	2	10	142 (88%)
Sixth Week	5	0	5	147 (91%)
Seventh Week	3	2	0	150 (93%)

Table (13) Assessment of Bleeding Patterns & Infection Screen at the Follow-up Visits

	Conservative (n = 161)	Surgical (n = 122)	P value
Assessment of Clinically Significant Bleeding Patterns:			
Bleeding beyond the 2nd week of follow-up (maximum: up to 36 days)	(5) 3%	0%	P = 0.2
Hb drop > 2g/dl	(7) 4.3%	(1) 1%	P = 0.14
A score > 600 on blood loss assessment charts	(11) 6.8%	0%	P = 0.003
Iron supplementation	(6) 3.7%	(4) 3%	P = 1.0
Blood transfusion	(1) 0.6%	0%	P = 1.0
Positive swab results in the two treatment groups			
Number of Positive Swabs			
Chlamydia	(3) 2%	(1) 1%	
B. Vaginosis	(16) 10%	(12) 10%	
Total	**(19) 12%**	**(13) 11%**	**P = 0.4**
Cases with Confirmed Pelvic Sepsis			
Women developed PID=	(0) 0%	(3) 2%	**P = 0.08**
Reasons for Antibiotic Treatment			
Chlamydia	3	1	
B. Vaginosis with clue cells	15	10	
Persistent Mixed anaerobes	5	6	
Clinically* suspicious vaginal discharge	2	3	
Total Number Treated with Antibiotics	**(25) 15.5%**	**(20) 16.4%**	**P = 1.0**

* Women treated because of a clinically suspicious vaginal discharge followed by negative bacteriological swab results

= PID = Pelvic inflammatory disease

Table (14) Reasons for self-referral to hospital

Reason for Emergency referrals	Conservative (n = 161)	Surgical (n = 122)	P value
Bleeding	(9) 5.5%	(1) 0.8%	
Bleeding requiring surgical evacuation	(1) 0.6%	(1) 0.8%	
Bleeding requiring blood transfusion	(1) 0.6%	0	
Suspected pelvic infection	(2) 1.2%	0	
Pain	(6) 3.7%	(1) 0.8%	
Reassurance & Counseling	(3) 1.8%	0	
Total	(20) 12.4%	(2) 1.6%	P <0.001

Table (15) Complications experienced by women in the two groups

Complication	**Conservative (n = 161)**	**Surgical (n = 122)**	**P Value**
Unplanned D & C	(3) 1.8%	(2) 1.6%	
Suspected uterine perforation	0	(2) 1.6%	
Urinary tract infection	0	(2) 1.6%	
Iron supplementation	(6) 3.7%	(3) 2.4%	
Blood transfusion	(1) 0.6%	0	
Pelvic sepsis	0	(3) 2.4%	
Total	(10) 6.2%	(12) 9.8%	***P = 0.2***

Table (16) Summary Table of the different outcome variables for incomplete and non-viable pregnancy in women randomised to conservative management.

	Incomplete Miscarriage (n = 36)	Nonviable Pregnancy (n = 125)
Required surgical evacuation	(0) 0%	(11) 9%
Emergency curettage		3
Elective curettage		8
Drop in Hb >2 g/dl	(0) %	(7) 6%
Score 300 - 599 on the blood loss charts	(5) 14%	(16) 13%
Score >600 on the blood loss charts	(0) %	(11) %
Iron supplementation	(2) 6%	(4) 3%
Blood transfusion	(0) %	(1) 1%
Number of women with positive swab	(7) 19%	(12) 10%
Chlamydia positive swab	(0) %	(3) 2%
Gonorrhoea positive swab	(0) %	(0) %
Bacterial Vaginosis swab	(7) 19%	(9) 7%
Women treated with antibiotics	(6) 17%	(18) 14%
Women with confirmed PID	(0) %	(0) %
Emergency referral for bleeding	(1) 3%	(8) 6%
Total Emergency referral	(1) 3%	(19) 15%

Table (17) Ultrasound measures used as prognostic measures of the incidence of complete miscarriage in women managed conservatively.

Ultrasound Measure	Failure Rate	Complete Miscarriage Rate	P Value
Volume of POC ≤31 cc^3	5%	95%	P = 0.0028
Volume of POC >31 cc^3	23%	77%	
AP diameter of POC ≤35 mm	5%	95%	P = 0.0088
AP diameter of POC >35 mm	19%	81%	
MSD diameter of ≤29 mm	6%	94%	P = 0.0083
MSD diameter of >29 mm	24%	76%	
Gestational sac volume ≤10 cc^3	6%	94%	P = 0.0072
Gestational sac volume >10 cc^3	25%	75%	

Table (18) Summary Table of the different outcome variables for the non-randomised groups

	Conservative (n = 31)	Surgical (n = 54)
Required surgical evacuation/re-evacuation	(3) 10%	(4) 7%
Emergency curettage	2	3
Elective curettage	1	1
Drop in Hb >2 g/dl	(3) 10%	0
Score >600 on the blood loss charts	(5) 16%	0
Iron supplementation	(5) 16%	(1) 2%
Blood transfusion	0	0
Number of women with positive swab	(3) 10%	(8) 15%
Chlamydia positive swab	(1) 3%	(2) 4%
Gonorrhoea positive swab	0	(1) 2%
Bacterial Vaginosis swab	(2) 6%	(5) 9%
Women treated with antibiotics	(5) 16%	(13) 24%
Women with PID required surgical evacuation	0	(1) 2%
Emergency referral for bleeding	(5) 16%	(3) 6%
Emergency referral for PID	0	(2) 4%
Emergency referral for pain	(2) (6%)	(3) 6%
Duration of pain in days	3.5	3.6
Highest score of pain	7.7	6.4

Table (19) Demographic characteristics of women in the two study groups

	Conservative (n = 161)	Suction Evacuation (n = 122)
Changed address	(8) 5%	(6) 5%
Responded	(105) 65%	(88) 72%
Did not respond	(48) 30%	(28) 23%
Marital status (number completed this question)	(n = 105)	(n = 87)
Married	(65) 62%	(57) 66%
Single	(39) 37%	(26) 30%
Divorced	(1) 1%	(4) 4.5%
Education (number completed this question)	(n = 105)	(n = 86)
Secondary school	(49) 47%	(44) 51%
College	(47) 45%	(40) 47%
University	(9) 8.5%	(2) 2%
Employment (number completed this question)	(n = 104)	(n = 88)
Employed	(62) 60%	(57) 65%
Self-employed	(6) 6%	(7) 8%
Unemployed	(36) 34.6%	(24) 27%
House-hold income (number completed this question)	(n = 102)	(n = 85)
< 10,000	(18) 18%	(17) 20%
10,000 – 15,000	(14) 14%	(10) 12%
15,000 – 25,000	(32) 31%	(24) 28%
25,000 – 40,000	(25) 24.5%	(23) 27%
40,000 – 50,000	(8) 8%	(8) 9%
> 50,000	(5) 5%	(3) 4%

There is a different total number for each parameter, as some of the women did not complete all the different sections of the questionnaire.

Table (20) Outcome measures of women managed by surgical uterine evacuation vs. conservatively managed

	Conservative (n = 161)	Surgical (n = 122)
Complete miscarriage n, (%)	*(150) 93.2%	(118) 96.7%
Emergency referrals n, (%)	(20) 12.4%	(2) 1.6%
Iron supplementation n, (%)	(6) 3.8%	(4) 3%
Blood transfusion n, (%)	(1) 0.6%	(0) 0%
Number of follow-up visits Median, (Range)	(2) (0-6)	(2) (0-3)
HB drop > 2g/dl n, (%)	(6) 3.8%	(1) 1%
Positive swabs n, (%)	(19) 12%	(13) 11%
Antibiotic treatment n, (%)	(25) 16%	(20) 16.4%
Acceptability n, (%)	(4) 2%	(1) 1%

* Complete miscarriage was achieved in 132 women managed conservatively within two weeks of expectancy period and in another 18 women within a further 5 weeks of expectancy.

Table (21) Total score of the different questionnaires for women in the two management groups

		Conservative	ERPC	P value
EPD1	≥13	(36) 22%	(27) 22%	P = 1.0
	<13	(109) 68%	(79) 65%	P = 0.6
	No score	(16) 10%	(16) 13%	P = 0.45
EPD2	≥13	(36) 22%	(26) 21.3%	P = 0.9
	<13	(106) 66%	(76) 62.3%	P = 0.6
	No score	(19) 12%	(20) 16.4%	P = 0.3
EPD3	≥13	(6) 4%	(11) 9%	P = 0.08
	<13	(86) 53%	(66) 54%	P = 1.0
	No score	(69) 43%	(45) 37%	P = 0.3
Women scored ≥13 at any of the questionnaires		(57) 35%	(46) 38%	P = 0.7
Women scored <13 at any of the questionnaires		(95) 59%	(66) 54%	P = 0.5
Women did not respond to any questionnaire		(9) 6%	(10) 8%	P = 0.5

Figure 4. Longitudinal assessment from recruitment (EPD1) till the completion of the hospital based care

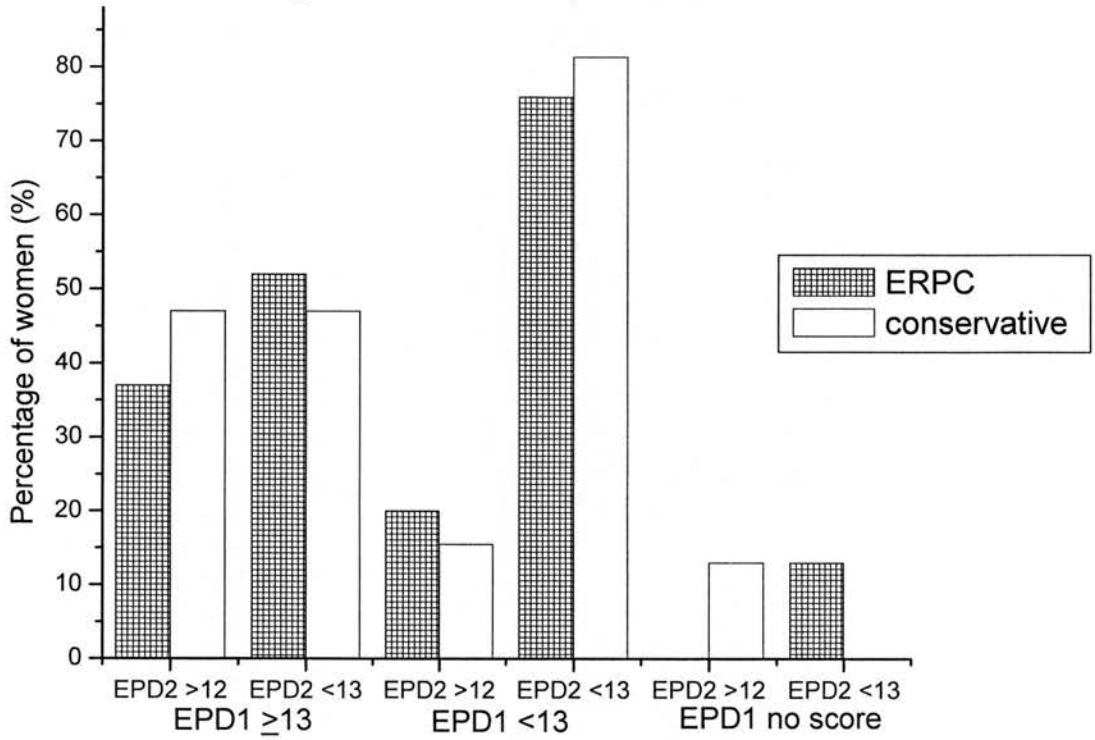


Table (22) Longitudinal assessment from recruitment (EPD1) till the completion of the hospital-based care (EPD2)

		Conservative	ERPC	P value
EPD1 ≥13 Conservative (n = 36) ERPC (n = 27)	EPD2 ≥13	(17) 47%	(10) 37%	P = 0.5
	EPD2 <13	(17) 47%	(14) 52%	P = 0.8
	EPD2 no score	(2) 6%	(3) 11%	P = 0.6
EPD1<13 Conservative (n = 109) ERPC (n = 79)	EPD2 ≥13	(17) 15.5%	(16) 20%	P = 0.4
	EPD2 <13	(89) 81.5%	(60) 76%	P = 0.4
	EPD2 no score	(3) 3%	(3) 4%	P = 0.7
EPD1 no score Conservative (n = 16) ERPC (n = 16)	EPD2 ≥13	(2) 13%	(0) 0%	P = 0.48
	EPD2 <13	(0) 0%	(2) 13%	P = 0.48
	EPD2 no score	(14) 87%	(14) 87%	P = 1.4

Figure 5. Longitudinal assessment from filling EPD2 until 12 weeks after recruitment

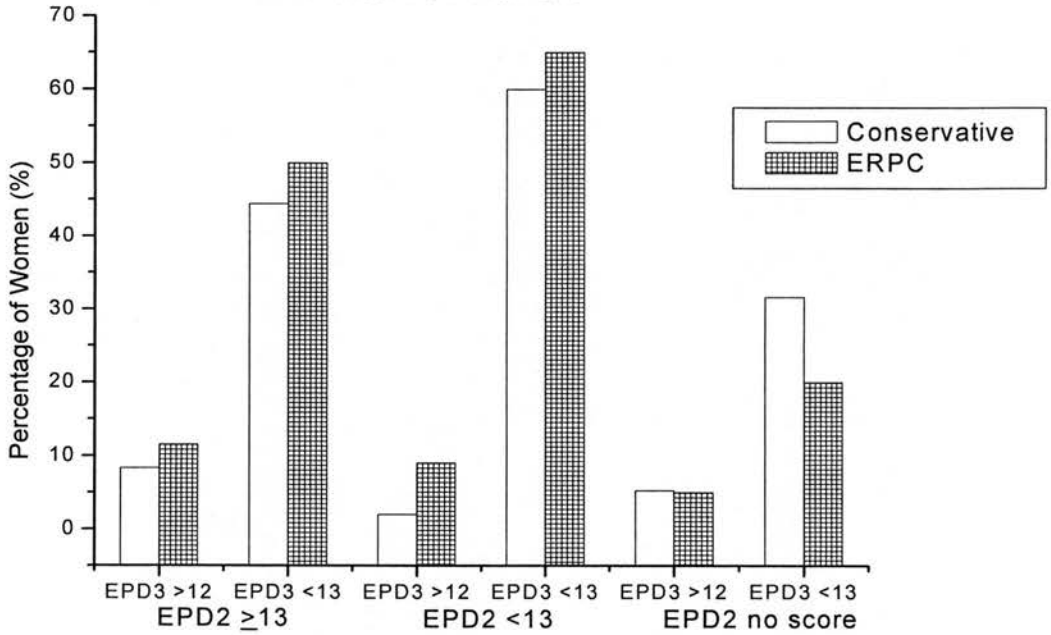


Table (23) Longitudinal assessment from filling EPD2 until 12 weeks after recruitment.

		Conservative	ERPC	P value
EPD2 ≥13 Conservative (n = 36) ERPC (n = 26)	EPD3 ≥13	(3) 8.3%)	(3) 11.5%	P = 0.7
	EPD3 <13	(16) 44.4%	(13) 50%	P = 0.8
	EPD3 no score	(17) 47.3%	(10) 38.5%	P = 0.1
EPD2 <13 Conservative (n = 106) ERPC (n = 76)	EPD3 ≥13	(2) 2%	(7) 9%	P = 0.035
	EPD3 <13	(64) 60%	(49) 65%	P = 0.6
	EPD3 no score	(40) 38%	(20) 26%	P = 0.11
EPD2 no score Conservative (n = 19) ERPC (n = 20)	EPD3 ≥13	(1) 5.3%	(1) 5%	P = 1.0
	EPD3 <13	(6) 31.6%	(4) 20%	P = 0.48
	EPD3 no score	(12) 63.1%	(15) 75%	P = 0.5

Table (24) The score of the individual questions and the total score of the questionnaire at different stages for women in the two management groups

	Management	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	Total
EPD1	Conservative score Mean ± SEM	0.56 ± 0.06	0.58 ± 0.06	1.23 ± 0.07	1.39 ± 0.08	0.97 ± 0.08	1.22 ± 0.06	0.77 ± 0.07	1.14 ± 0.08	0.86 ± 0.07	0.09 ± 0.03	8.83 ± 0.45
	ERPC score Mean ± SEM	0.51 ± 0.07	0.56 ± 0.08	1.3 ± 0.08	1.62 ± 0.09	1.13 ± 0.1	1.1 ± 0.08	0.79 ± 0.09	1.07 ± 0.09	0.81 ± 0.08	0.1 ± 0.03	8.95 ± 0.55
EPD2	Conservative score Mean ± SEM	0.61 ± 0.06	0.63 ± 0.07	1.22 ± 0.08	1.1 ± 0.08	0.88 ± 0.07	1.15 ± 0.06	0.78 ± 0.07	0.91 ± 0.07	1.04 ± 0.06	0.15 ± 0.04	8.49 ± 0.49
	ERPC score Mean ± SEM	0.66 ± 0.07	0.7 ± 0.07	1.17 ± 0.08	1.09 ± 0.1	0.97 ± 0.09	1.19 ± 0.08	0.96 ± 0.09	0.96 ± 0.09	1.2 ± 0.07	0.18 ± 0.06	9.09 ± 0.56
EPD3	Conservative score Mean ± SEM	0.12 ± 0.03	0.16 ± 0.05	0.84 ± 0.08	0.85 ± 0.08	0.63 ± 0.08	0.81 ± 0.08	0.34 ± 0.06	0.5 ± 0.07	0.56 ± 0.05	0.07 ± 0.03	4.88 ± 0.45
	ERPC score Mean ± SEM	0.28 ± 0.07	0.32 ± 0.08	0.95 ± 0.1	0.96 ± 0.11	0.6 ± 0.1	0.84 ± 0.1	0.55 ± 0.09	0.53 ± 0.09	0.67 ± 0.08	0.17 ± 0.06	5.85 ± 0.72

In the past 7 days: **Q1.** I have been able to laugh and see the funny side of things: (a) as much as I always did (b) not quite so much now (c) definitely not so much now (d) not at all. **Q2.**I have looked forward with enjoyment to things: (a) as much as I ever did (b) rather less than I used to (c) definitely less than I used to (d) hardly at all. **Q3.** I have blamed myself unnecessarily when things went wrong: (a) yes, most of the time (b) yes, some of the time (c) not very often (d) no, never. **Q4.** I have been anxious or worried for no good reason (a) no, not at all (b) hardly ever (c) yes, sometimes (d) yes, very often. **Q5.** I have felt scared or panicky for no good reason: (a) yes, quite a lot (b)yes, sometimes (c) no, not much (d) no, not at all. **Q6.** Things have been getting on top of me: (a) yes, most of the time I haven't been able to cope at all (b) yes, sometimes I haven't been coping as well as usual (c) no, most of the time I have coped quite well (d) no, I have been coping as well as ever. **Q7.** I have been so unhappy that I have much difficulty sleeping: (a) yes, most of the time (b) yes, sometimes (c) not very often (d) no, not at all. **Q8.** I have felt sick or miserable: (a) yes, most of the time (b) yes, quite often (c) not very often (d) no, not at all. **Q9.** I have been so unhappy that I have been crying: (a) yes, most of the time (b) yes, quite often (c) only occasionally (d) no, never. **Q10.** The thought of harming myself has occurred to me: (a) yes, quite often (b) sometimes (c) hardly ever (d) never.

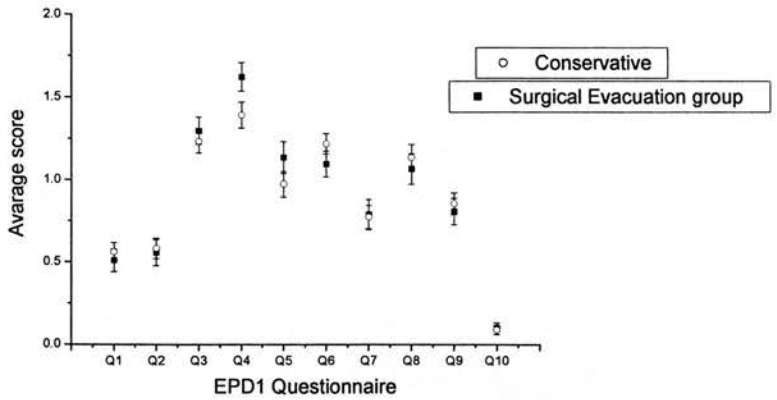


Figure 6. Score of the individual questions of EPD1

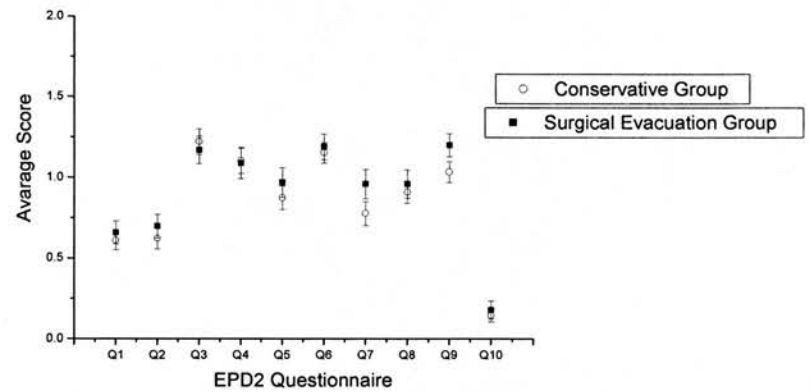


Figure 7. Score of the individual questions of EPD2

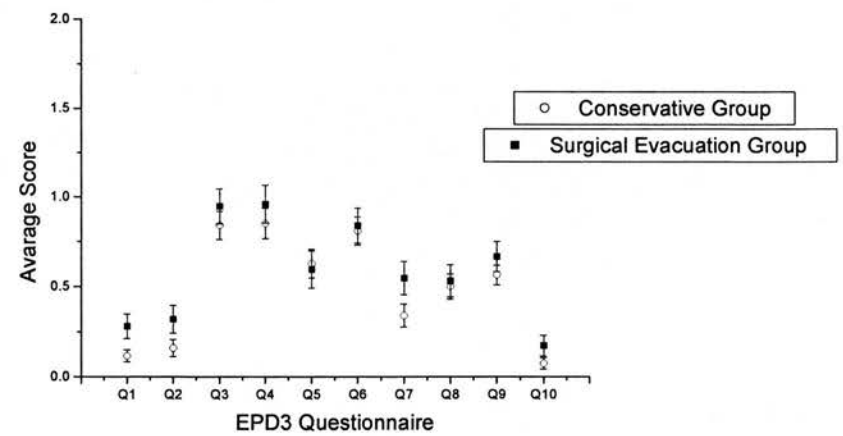


Figure 8. Score of the individual questions of EPD3

Table (25) Differences in psychological reactions for women with successful outcome (≤ 14 days and > 14 days expectancy period) v. unsuccessful outcome who were managed conservatively

	Successful (n = 150)			Failed (n = 11)
	≤ 14 days (n = 132)	> 14 days (n = 18)	Total (n = 150)	
EPD1 total score, Median (Range)	7 (0 –27)	11.0 (3 – 15)	8.0 (0 – 27)	14 (5 – 23)
Number of cases, %	(26/132) 19.7%	(5/18) 27.7%	(31/150) 20.6%	(5/11) 45%
EPD2 total score, Median (Range)	7.5 (0 – 24)	11 (2 – 24)	8.5 (0 – 24)	9.5 (2 – 18)
Number of cases, %	(26/132) 19.7%	(7/18) 38.8%	(33/150) 22%	(3/11) 27%
EPD3 total score, Median (Range)	4 (0 – 18)	5 (0 – 13)	4.0 (0 – 18)	8 (1 – 11)
Number of cases, %	(5/132) 3.7%	(1/18) 5.5%	(6/150) 4%	(0/11) 0%

Table (26) Psychological Community services as reported in GP questionnaire

	Conservative	ERPC	P Value
Requiring antidepressants or sedatives	3	7	
Feeling depressed	2	5	
Requiring emotional support &/or Reassurance	3	4	
Total	8	16	P = 0.02

Table (27) Characteristics of women in both conservative and surgical evacuation groups taking part in the study of return to ovulation and follicular growth

	Conservative (n = 30)	Surgical evacuation (n = 30)	P Value
Age in years, Mean (SD)	31.2 (4.6)	30.5 (4.5)	0.55
Parity, Mean (SD)	1.7 (0.5)	1.6 (0.5)	0.42
Period of Amenorrhea, Median (Range)	72 (40 – 93)	75 (51 – 97)	0.12
HCG at recruitment days, Median (Range)	8319 (274 – 63004)	10846 (529 – 122696)	0.05
Progesterone, Mean (SD)	20.7 (17.9)	21.5 (13.8)	0.84
Estradiol, Median (Range)	436 (85 – 1888)	567 (118 – 5012)	0.23

Table (28) The breakdown of the cycle type in both treatment groups

	Conservative (n = 30)	**ERPC (n = 30)**	**P Value**
Ovulatory	(18) 60%	(22) 73%	P = 0.4
Abnormal Ovulation	(2) 6.7%	(2) 6.7%	
***LUF**	(9) 30%	(5) 17%	P = 0.3
Anovulatory	(1) 3.3%	(1) 3.3%	

* LUF = Luteinized unruptured follicle

Table (29) Comparison of the findings in women with ovulatory cycles in the two management groups

	Conservative	ERPC	P Value
Women with ovulatory cycles (n, %)	(18) 60%	(22) 73%	P = 0.4
Total duration of the cycle till menstruation in days (Median, Range)	33 (19 - 58)	32.5 (23 – 48)	
Cycles with total durations > 42 days (n, %)	(3) 17%	(3) 14%	P = 1.0
*Duration of the first half of the cycle in days (Median, range)	20 (10 – 47)	21 (11 – 35)	
**Length of luteal phase of the cycle in days (Median, range)	13 (4 – 16)	12.5 (9 – 21)	
† βHCG drop rate at the end of 1st week following allocation to management (Median, range)	97% (0.0 – 0.99)	98 % (0.54 – 0.99)	P = 0.4
‡ βHCG drop rate at the end of 2nd week following allocation to management (Median, range)	99% (0.37 – 0.99)	99% (0.95 – 0.99)	P = 0.1
βHCG serum levels at the end of the 1st week of follow-up (Median, Range)	103.50 (12 – 36150)	158 (25 – 2818)	P = 0.47
βHCG serum levels at the end of the 2nd week of follow-up (Median, Range)	20.5 (2.0- 7447)	20.5 (3 – 833.0)	P = 0.8
† P^4 drop rate at the end of 1st week following allocation to management (Mean, SEM)	58.7% (0.1106)	72.3% (0.07737)	P = 0.3
‡ P^4 serum levels at the end of the 1st week of follow-up in (nmol/l) (Median, Range)	1.95 (0.7 – 46.3)	2.000 (2 – 20.8)	P = 0.7
† E^2 drop rate at the end of 1st week following allocation to management (Mean, SEM)	40% (0.1449)	44% (0.1828)	P = 0.87
‡ E^2 serum levels at the end of the 1st week of follow-up in (mmol/l) (Median, Range)	115 (25 – 870)	123 (25 – 651)	P = 0.84

* The duration of the 1st part of the cycle was estimated starting from complete miscarriage till the occurrence of LH surge.

** The second half of the cycle was estimated from the occurrence of LH surge till the commencement of menstrual bleeding.

† The drop rate at the end of week 1was calculated as the difference between the levels at recruitment and after 1 week divided by the levels at recruitment.

‡ The drop rate at the end of week 2 was calculated as the difference between levels at week 1 and week 2 divided by the levels at week 1.

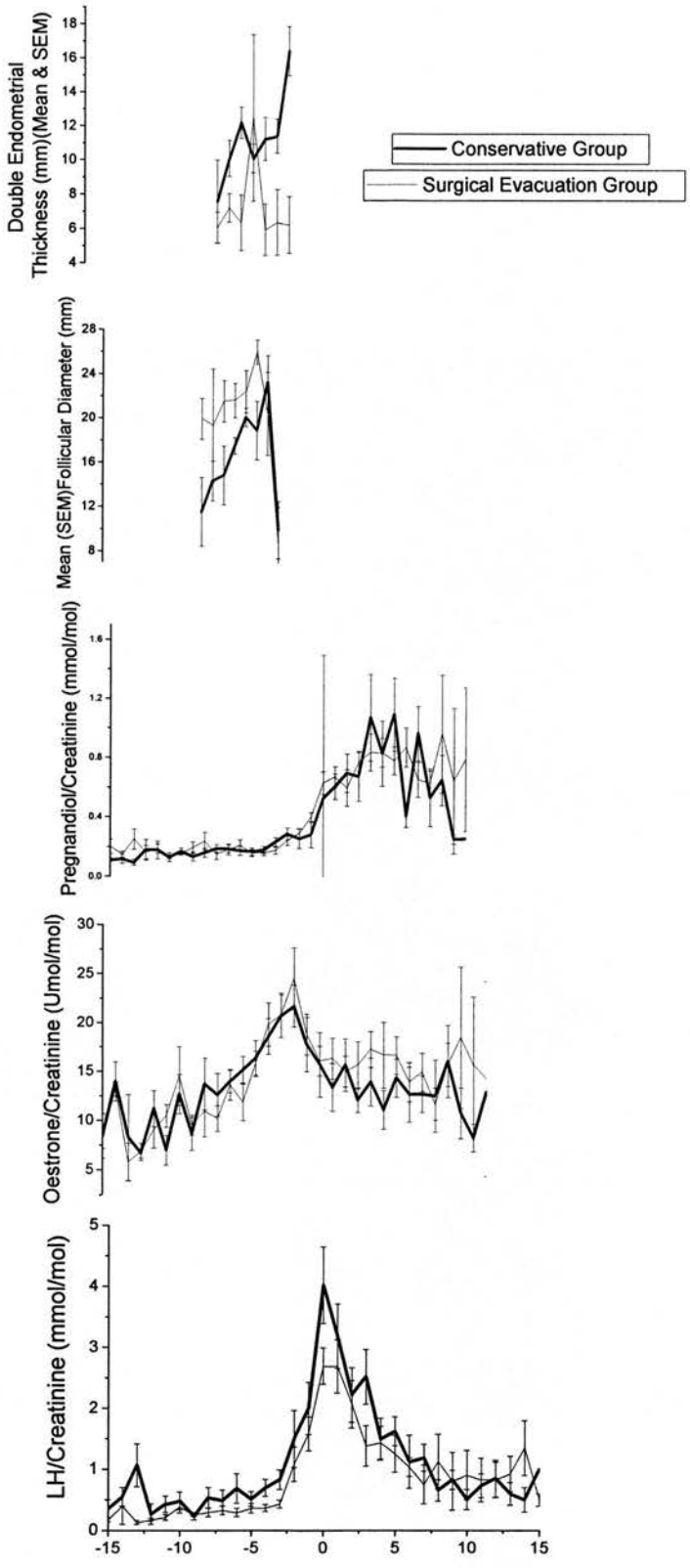


Figure 9. Comparison of the data of the ovulatory cycles between the two study groups. It showed significant differences in urinary LH and E_2 levels

Table (30) Data of ovulatory cycles for women managed conservatively and for women managed by surgical evacuation

Days		-15	-11	-8	-5	-4	-3	-2	-1	0	1	2	3	4	9	14
LH Value																
Conservative	**Mean±**	0.35±	0.43±	0.54±	0.51±	0.7±	0.83±	1.5±	2±	4.02±	3.19±	2.22±	2.52±	1.49±	0.83±	0.5±
	SEM	0.15	0.13	0.17	0.12	0.14	0.16	0.47	0.43	0.62	0.53	0.45	0.45	0.34	0.16	0.2
ERPC	**Mean±**	0.18±	0.22±	0.3±	0.36±	0.37±	0.43±	1.08±	1.58±	2.7±	2.69±	2.07±	1.38±	1.43±	0.8±	1.35±
	SEM	0.03	0.05	0.07	0.08	0.06	0.07	0.28	0.28	0.3	0.44	0.39	0.33	0.27	0.47	0.45
Estrogen E2 Value																
Conservative	**Mean±**	8.45±	11.2±	8.7±	14±	15.2±	16.5±	18.6±	20.7±	21.7±	17.8±	15.8±	13.4±	15.7±	12.7±	8.3±
	SEM	2.26	1.83	1.66	1.14	1.36	1.76	1.81	2.2	2.15	2.77	3.29	2.42	2.67	2.81	1.39
ERPC	**Mean**	8.23±	9.05±	9.56±	13.7±	11.9±	15.8±	19.9±	20.8±	24.5±	18.8±	16.1±	16.4±	15.1±	14±	15.8±
	SEM	1	1.8	1.02	1.58	1.87	1.29	2.23	2.28	3.19	2.1	1.51	2.07	1.58	1.99	6.97
Progesterone Value																
Conservative	**Mean±**	0.11±	0.18±	0.14±	0.19±	0.18±	0.17±	0.18±	0.24±	0.29±	0.26±	0.29±	0.53±	0.61±	1.1±	0.26±
	SEM	0.01	0.06	0.03	0.03	0.03	0.02	0.02	0.03	0.04	0.07	0.09	0.97	0.09	0.25	0.03
ERPC	**Mean±**	0.2±	0.19±	0.2±	0.19±	0.21±	0.16±	0.16±	0.18±	0.25±	0.29±	0.4±	0.63±	0.67±	0.78±	0.65±
	SEM	0.05	0.03	0.04	0.04	0.04	0.02	0.02	0.02	0.03	0.04	0.03	0.08	0.07	0.09	0.49
Follicuar Growth			**-11**	**-8**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**		
Conservative	**Mean±**		0	12.9±	14.4±	14.9±	17.5±	20.1±	18.9±	23.3±	9.96±	2.93±	11.3±	6.21±		
	SEM			1.33	1.8	2.65	0.74	0.84	2.65	2.41	2.59	2.93	5.76	3.6		
ERPC	**Mean±**		8.3	15.5±	16±	17.8±	17.9±	18.5±	21.4±	16.9±	7.29±	8.76±	11.7±	9.8±		
	SEM			2.5	4.16	1.53	1.26	1.55	0.87	3.04	2.74	2.43	3.87	3.2		
Double Endometrial Thickness						**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**		
Con OV	**Mean±**		17.9	7.35±	12.4±	7.6±	10.1±	12.2±	10.1±	11.3±	11.4±	16.5±	10.1±	8.6±		
	SEM			1.45	3.7	2.4	1.06	0.93	0.83	1.26	1	1.45	0.91	1.56		
ERPC	**Mean±**		4.6	7.8	5.85±	7.75±	8.44±	7.93±	11.6±	7.69±	7.95±	7.86±	9.93±	7.75±		
	SEM				0.85	0.54	0.5	0.97	2.93	0.89	1.15	1	2.2	0.15		

Table (31) Comparison between women managed conservatively with ovulatory and LUF cycles

	Women with Ovulatory Cycles	Women with LUF	P Value
Number of cycles (n, %)	(18) 60%	(9) 30%	
Total duration of the cycle till menstruation in days (Mean, SD)	34 (SD 2.3)	29 (SD 3)	P = 0.2
*Duration of the first half of the cycle in days (Mean, SD)	23 (SD 9)	19 (SD 6)	
**Length of luteal phase of the cycle in days (Mean, SD)	11 (SD 3)	10 (SD 5)	
† βHCG drop rate at the end of 1st week following allocation to management (Median, range)	97% (0.0 – 0.99)	79% (0.13– 0.97)	P = 0.07
‡ βHCG drop rate at the end of 2nd week following allocation to management (Median, range)	99% (0.37 - 0.99)	96% (0.60 - 0.96)	P = 0.1
βHCG serum levels at the end of the 1st week of follow-up (Median, Range)	103.50 (12.0 - 36150)	626 (65.0 – 7805.0)	P = 0.01
βHCG serum levels at the end of the 2nd week of follow-up (Median, Range)	20.5 (2 – 7447.0)	329.00 (21 – 1813)	P = 0.03
† P^4 drop rate at the end of 1st week following allocation to management (Median, Range)	74% (-0.8 – 0.98)	70% (–0.07 – 0.70)	P = 0.59
‡ P^4 serum levels at the end of the 1st week of follow-up in (nmol/l) (Median, Range)	1.95 (0.7 – 46.3)	7.2 (2.5 – 14.3)	P = 0.01
† E^2 drop rate at the end of 1st week following allocation to management (Median, Range)	72% (-1 – 0.98)	45% (-0.45 – 0.97)	P = 0.6
‡ E^2 serum levels at the end of the 1st week of follow-up in (mmol/l) (Median, Range)	115.00 (25 – 870)	190 (25 – 393)	P = 0.69

* The duration of the 1st part of the cycle was estimated starting from complete miscarriage till the occurrence of LH surge.
** The second half of the cycle was estimated from the occurrence of LH surge till the commencement of menstrual bleeding.
† The drop rate at the end of week 1was calculated as the difference between the levels at recruitment and after 1 week divided by the levels at recruitment.
‡ The drop rate at the end of week 2 was calculated as the difference between levels at week 1 and week 2 divided by the levels at week 1.

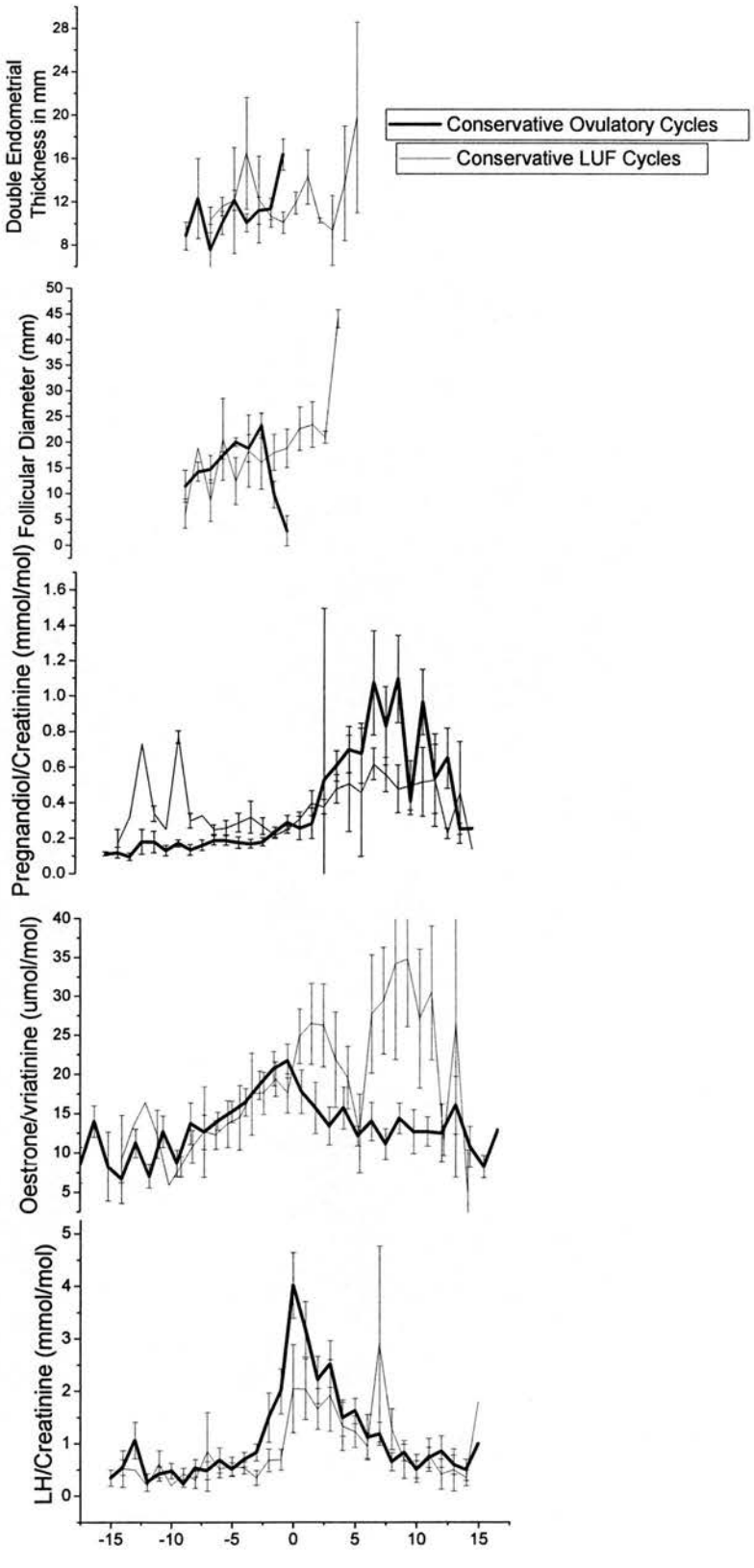


Figure 10. Comparison between ovulatory & LUF cycles for women in the conservative groups

Table ((32) Data of ovulatory and ULF cycles for women managed conservatively

Days		**-15**	**-11**	**-8**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**12**	**14**
LH Vlue																			
Ovulatory	**Mean±**	0.35±	0.43±	0.54±	0.7±	0.83±	1.5±	2±	4.02±	3.19±	2.22±	2.52±	1.49±	1.62±	1.13±	1.19±	0.66±	0.85±	0.5±
	SEM	0.15	0.13	0.17	0.14	0.16	0.47	0.43	0.62	0.53	0.45	0.45	0.34	0.24	0.43	0.22	0.17	0.3	0.2
ULF	**Mean±**		0.61±	0.31±	0.54±	0.35±	0.68±	0.69±	2.05±	2.04±	1.66±	1.92±	1.33±	1.23±	0.96±	2.9±	1.28±	0.42±	0.35±
	SEM		0.26	0.16	0.11	0.14	0.22	0.2	0.84	0.58	0.39	0.68	0.46	0.3	0.24	1.87	0.39	0.28	0.15
Estradiol Value																			
Ovulatory	**Mean±**	8.45±	11.2±	8.7±	15.2±	16.5±	18.6±	20.7±	21.7±	17.8±	15.8±	13.4±	15.7±	12.2±	14±	11.1±	14.4±	16.1±	8.3±
	SEM	2.26	1.83	1.66	1.36	1.76	1.81	2.2	2.15	2.77	3.29	2.42	2.67	1.26	2.45	1.96	1.94	3.69	1.39
ULF	**Mean±**		12.4±	10.8±	14.5±	17.5±	17.6±	19.4±	17.6±	24.9±	26.5±	26.3±	21.9±	19.6±	12.5±	27.8±	29.5±	30.5±	26.4±
	SEM		3.06	2.05	4.1	5.2	2.7	2.2	2.5	3.5	5.2	5.3	6.1	4	5	7.6	6.88	8.63	19.4
Progesterone Value																			
Ovulatory	**Mean±**	0.11±	0.18±	0.14±	0.18±	0.17±	0.18±	0.24±	0.29±	0.26±	0.29±	0.53±	0.61±	0. 7±	0.68±	1.08±	0.83±	0.54±	0.26±
	SEM	0.01	0.06	0.03	0.03	0.02	0.02	0.03	0.04	0.07	0.09	0.97	0.09	0.13	0.17	0.3	0.22	0.19	0.03
ULF	**Mean±**		0.34±	0.3±	0.29±	0.32±	0.27±	0.22±	0.25±	0.31±	0.4±	0.38±	0.48±	0.51±	0.46±	0.62±	0.56±	0.53±	0.46±
	SEM		0.04	0.04	0.05	0.09	0.05	0.02	0.02	0.04	0.07	0.04	0.08	0.27	0.36	0.09	0.1	0.26	0.29
Follicular Growth			**-11**	**-8**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**	**6**				
Ovulatory	**Mean±**		0	12.9±	14.9±	17.5±	20.1±	18.9±	23.3±	9.96±	2.93±	11.3±	6.21±	9.6	18.5				
	SEM			1.33	2.65	0.74	0.84	2.65	2.41	2.59	2.93	5.76	3.6						
ULF	**Mean±**				17.1±	27.3±	20.4±	25.4±	23.6±	25.2±	25.9±	29.1±	29.8±	27.7±	47.5±				
	SEM				3.45	6.8	3.9	6	4.5	3	3.2	3.6	3.8	1	1.5				
Double Endometrial Thickness			**-11**	**-8**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**		
Ovulatory	**Mean±**		17.9	7.35±	6.35±	9.55±	14.4±	10.1±	11.3±	11.4±	16.5±	10.1±	8.6±						
	SEM			1.45	2.4	1.06	0.93	0.83	1.26	1	1.45	0.91	1.56						
ULF	**Mean±**				10.4±	11.7±	12.2±	16.6±	12.3±	10.7±	10.2±	12±	14.4±	10.4±	9.45±	13.8±	19.9±		
	SEM				1.19	0.85	4.90	5.15	4.00	0.97	0.98	1.00	2.49	0.23	3.25	5.29	8.80		

Table (33) Comparison between women managed by surgical evacuation with ovulatory and LUF cycles

	Women with Ovulatory Cycles	Women with LUF	P Value
Number of cycles (n, %)	(22) 73%	(5) 17%	
Total duration of the cycle till menstruation in days (Mean, SD)	34 (SD 6)	34 (SD 13)	P = 0.3
*Duration of the first half of the cycle in days (Mean, SD)	21 (SD 5)	22 (SD 12)	P = 0.3
**Length of luteal phase of the cycle in days (Mean, SD)	13 (SD 3	12 (SD 1)	P = 0.55
βHCG drop rate at the end of 1st week following allocation to management	98% (0.54 - 0.98)	98% (0.59 – 0.99)	P > 0.99
βHCG drop rate at the end of 2nd week following allocation to management	99% (0.95 - 0.99)	99% (0.83 – 0.99)	P = 0.4
βHCG serum levels at the end of the 1st week of follow-up (Median, Range)	158.50 (25 – 2818)	42 (14 – 237)	P = 0.08
βHCG serum levels at the end of the 2nd week of follow-up (Median, Range)	20.5 (3.0 – 833.0)	14 (2 – 85)	P = 0.78
† P^4 drop rate at the end of 1st week following allocation to management (Median, Range)	85% (0.0 – 0.97)	76% (–1.5 – 0.89)	P = 0.3
‡ P^4 serum levels at the end of the 1st week of follow-up in (nmol/l) (Median, Range)	2.0 (0.2 – 20.8)	3.2 (1.6 – 8.7)	P = 0.3
† E^2 drop rate at the end of 1st week following allocation to management (Median, Range)	76% (-2.3 - 0.96)	0.56% (-0.81– 0.98)	P = 0.85
‡ E^2 serum levels at the end of the 1st week of follow-up in (mmol/l) (Median, Range)	123.0 (25.0 – 651)	80.0 (62 – 482.0)	P = 0.65

* The duration of the 1st part of the cycle was estimated starting from complete miscarriage till the occurrence of LH surge.

** The second half of the cycle was estimated from the occurrence of LH surge till the commencement of menstrual bleeding.

† The drop rate at the end of week 1was calculated as the difference between the levels at recruitment and after 1 week divided by the levels at recruitment.

‡ The drop rate at the end of week 2 was calculated as the difference between levels at week 1 and week 2 divided by the levels at week 1.

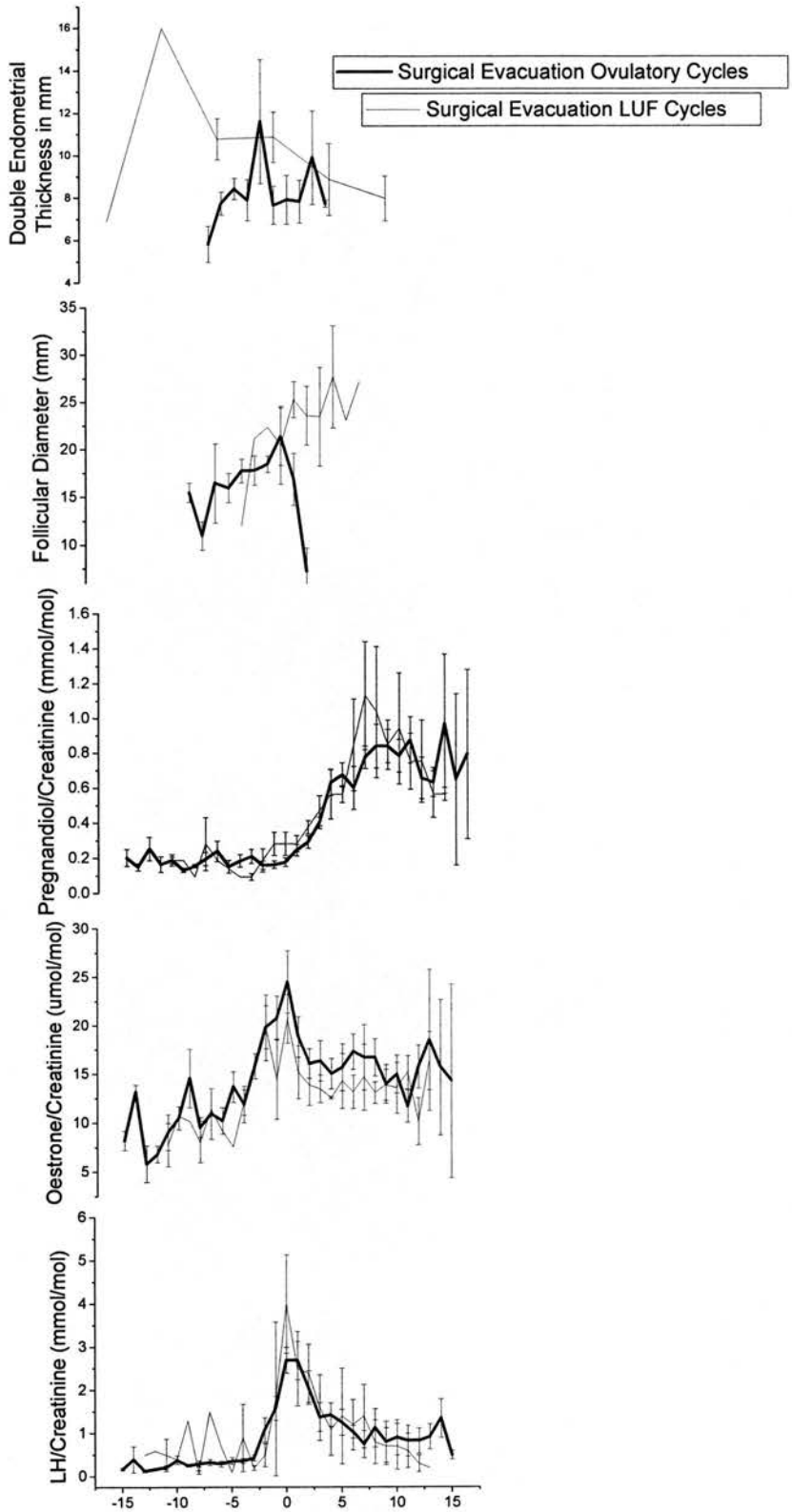


Figure 11. Comparison of ovulatory and LUF cycles in the surgical evacuation group

Table (34) Data of ovulatory and ULF cycles for women managed by surgical evacuation

LH value																
Days		**-15**	**-11**	**-8**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**8**	**11**	**15**
Ovulatory	**Mean±**	0.18±	0.22±	0.3±	0.36±	0.37±	0.43±	1.08±	1.58±	2.7±	2.69±	2.07±	1.38±	1.43±	1.13±	0.83±	0.5±
	SEM	0.03	0.05	0.07	0.08	0.06	0.07	0.28	0.28	0.3	0.44	0.39	0.33	0.27	0.45	0.36	0.1
ULF	**Mean±**	0.3	0.5±	0.1±	0.1	0.9±	0.2±	0.5±	1.8±	4±	2.5±	2.4±	1.6±	1.1±	0.8±	0.6±	0.3
	SEM		0.37	0.04		0.78	0.05	0.27	1.78	1.14	0.86	0.67	0.76	0.61	0.51	0.40	
Oestrogen E2 value																	
Ovulatory	**Mean±**	8.23±	9.05±	9.56±	13.7±	11.9±	15.8±	19.9±	20.8±	24.5±	18.8±	16.1±	16.4±	15.1±	16.7±	11.7±	14.35±
	SEM	1	1.8	1.02	1.58	1.87	1.29	2.23	2.28	3.19	2.1	1.51	2.07	1.58	1.92	1.64	9.95
ULF	**Mean±**	16.9	7.8±	8.1±	7.6	12.1±	15.6±	19.8±	14.5±	20.7±	15.2±	13.9±	13.5±	12.6±	13.1±	15.2±	9.2
	SEM		2.2	2.1		1.3		3.4	4.1	2.5	2.7	2.1	1.4	0.1	1.1	1.7	
Progesterone value																	
Ovulatory	**Mean±**	0.2±	0.19±	0.2±	0.19±	0.21±	0.16±	0.16±	0.18±	0.25±	0.29±	0.4±	0.63±	0.67±	0.84±	0.66±	0.795±
	SEM	0.05	0.03	0.04	0.04	0.04	0.02	0.02	0.02	0.03	0.04	0.03	0.08	0.07	0.1	0.12	0.485
ULF	**Mean±**	0.3	0.2±	0.3±	0.1±	0.1±	0.2±	0.3±	0.3±	0.3±	0.4±	0.5±	0.6±	0.6±	0.9±	0.8±	0.4
	SEM		0.02	0.16		0.02	0.07	0.07	0.07	0.05	0.04	0.09	0.15	0.05	0.15	0.25	
Follicular Growth			**-11**	**-8**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**8**	**11**	
Ovulatory	**Mean±**		0		16.5±	16±	17.8±	17.9±	18.5±	21.4±	16.9±	7.29±	8.76±	11.7±	6.7±	4	
	SEM				4.16	1.53	1.26	1.55	0.87	3.04	2.74	2.43	3.87	3.2	3.84		
ULF	**Mean±**						12.1	21.2	22.4	20.5±	25.3±	23.6±	23.5±	27.7±	21.4	23.6	
	SEM									4.1	1.9	3.1	5.2	5.4			
Double Endometrial Thickness			**-11**	**-8**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**			
Ovulatory	**Mean±**		4.6	7.8	5.85±	7.75±	8.44±	7.93±	11.6±	7.69±	7.95±	7.86±	9.93±	7.75±			
	SEM				0.85	0.54	0.5	0.97	2.93	0.89	1.15	1	2.2	0.15			
ULF	**Mean±**		18.6					6.9	16	10.8±	10.9±	8.9±	8±	7.3±			
	SEM									0.97	1.19	1.69	1.05	1.75			

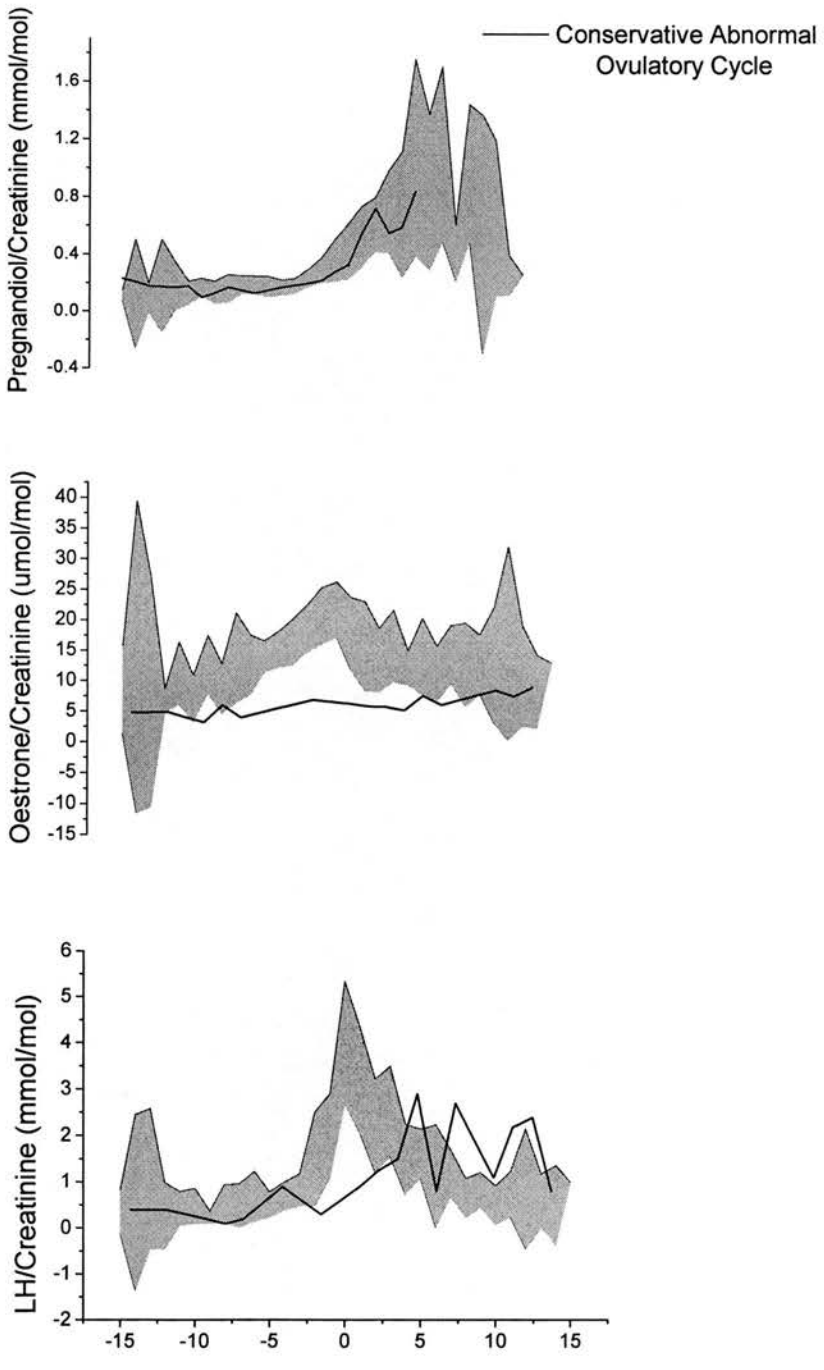


Figure 12. Comparison of the urinary hormone levels of the first woman with abnormal ovulation against the whole data reference (upper 95% & lower 95% CI) for women with ovulatory cycles in the conservative group.

Table (35) Data of the 1st woman with abnormal ovulation managed conservatively

Days		-16	-11	-8	-6	-5	-4	-3	-2	-1	0	1	2	3	4	9	14
LH VLUE																	
Ovulatory	**Mean±**	0.17±	0.43±	0.54±	0.69±	0.51±	0.7±	0.83±	1.5±	2±	4.02±	3.19±	2.22±	2.52±	1.49±	0.83±	0.5±
	SEM	0.03	0.13	0.17	0.24	0.12	0.14	0.16	0.47	0.43	0.62	0.53	0.45	0.45	0.34	0.16	0.2
1st *Ab Ov		0.5	0.2			0.3				1.5	2.9	0.8	2.7		1.1		
Oestrogen E2 Value		**-16**	**-11**	**-8**	**-6**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**9**	**14**
Ovulatory	**Mean±**	8.2±	11.2±	8.7±	12.7±	14±	15.2±	16.5±	18.6±	20.7±	21.7±	17.8±	15.8±	13.4±	15.7±	12.7±	8.3±
	SEM	2.4	1.83	1.66	2.18	1.14	1.36	1.76	1.81	2.2	2.15	2.77	3.29	2.42	2.67	2.81	1.39
1st *Ab Ov		5.6	3.2			6.9				5.8	5.2	7.6	6.1		7.7		
Progesterone Value		**-16**	**-11**	**-8**	**-6**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**9**	**14**
Ovulatory	**Mean±**	0.21±	0.18±	0.14±	0.19±	0.19±	0.18±	0.17±	0.18±	0.24±	0.29±	0.26±	0.29±	0.53±	0.61±	1.1±	0.26±
	SEM	0.13	0.06	0.03	0.03	0.03	0.03	0.02	0.02	0.03	0.04	0.07	0.09	0.97	0.09	0.25	0.03
1st *Ab Ov		0.26	0.17			0.13				0.20	0.22	0.28	0.33		0.72		
Follicular Growth		**-16**	**-11**	**-8**	**-6**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**		
Ovulatory	**Mean±**		0	12.9±	11.6±	14.4±	14.9±	17.5±	20.1±	18.9±	23.3±	9.96±	2.93±	11.3±	6.21±		
	SEM			2.5	1.5	4.16	1.53	1.26	1.55	0.87	3.04	2.74	2.43	3.87	3.2		
1st *Ab Ov		23.7		0													
Double Endometrial Thickness		**-16**	**-11**	**-8**	**-6**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**		
Ovulatory	**Mean±**		17.9±	7.35±	8.9±	12.4±	7.6±	10.1±	12.2±	10.1±	11.3±	11.4±	16.5±	10.1±	8.6±		
	SEM			1.45	1.3	3.7	2.4	1.06	0.93	0.83	1.26	1	1.45	0.91	1.56		
1st *Ab Ov		12.3		11.9													

* Ab Ov = Abnormal Ovulation

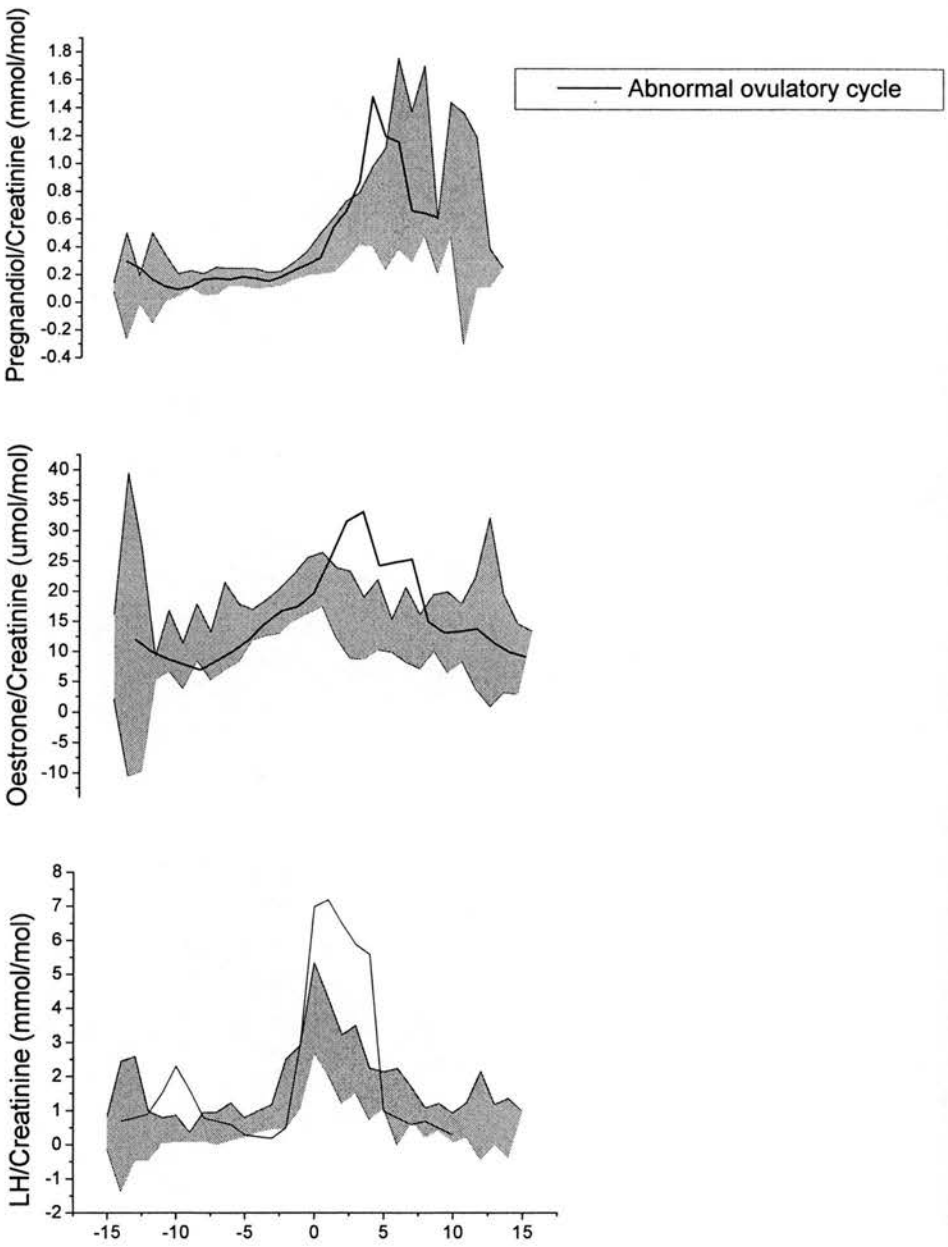


Figure 13. Comparison of the urinary hormone levels of the second woman with abnormal ovulation against the whole data reference (upper 95% & lower 95% CI) for women with ovulatory cycles in the conservative group.

Table (36) Data of the 2nd woman with abnormal ovulation managed conservatively

Days		-16	-11	-8	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	8	10	14
LH VLUE																			
Ovulatory	**Mean±**	0.17±	0.43±	0.54±	0.51±	0.7±	0.83±	1.5±	2±	4.02±	3.19±	2.22±	2.52±	1.49±	1.62±	1.13±	0.66±	0.51±	0.5±
	SEM	0.03	0.13	0.17	0.12	0.14	0.16	0.47	0.43	0.62	0.53	0.45	0.45	0.34	0.24	0.43	0.17	0.16	0.2
2nd *Ab Ov		0.7		0.8	<0.6		<0.4	0.5	3.0	7.0	7.2		5.9	5.6	1.0		0.7	0.3	
Oestrogen E2 Value																			
Ovulatory	**Mean±**	8.2±	11.2±	8.7±	14±	15.2±	16.5±	18.6±	20.7±	21.7±	17.8±	15.8±	13.4±	15.7±	12.2±	14±	14.4±	12.8±	8.3±
	SEM	2.4	1.83	1.66	1.14	1.36	1.76	1.81	2.2	2.15	2.77	3.29	2.42	2.67	1.26	2.45	1.94	1.87	1.39
2nd *Ab Ov		12.0		10.1	16.8		19.8	25.5	31.7	33.2	24.3		25.4	15.1	13.2		11.6	9.2	
Progesterone Value																			
Ovulatory	**Mean±**	0.21±	0.18±	0.14±	0.19±	0.18±	0.17±	0.18±	0.24±	0.29±	0.26±	0.29±	0.53±	0.61±	0.7±	0.68±	0.83±	0.41±	0.26±
	SEM	0.13	0.06	0.03	0.03	0.03	0.02	0.02	0.03	0.04	0.07	0.09	0.97	0.09	0.13	0.17	0.22	0.08	0.03
2nd *Ab Ov		0.30		0.17	0.19		0.16	0.19	0.24	0.28	0.33		0.67	0.87	1.48		0.67	0.62	

Follicular Growth		**-16**	**-11**	**-8**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**	**6**
Ovulatory	**Mean±**		0	12.9±	14.4±	14.9±	17.5±	20.1±	18.9±	23.3±	9.96±	2.93±	11.3±	6.21±	9.6±	18.5
	SEM			2.5	4.16	1.53	1.26	1.55	0.87	3.04	2.74	2.43	3.87	3.2	5	
2nd *Ab Ov				14.9	21.7	24.1			25.4			13.9				

Double Endometrial Thickness		**-16**	**-11**	**-8**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**
Ovulatory	**Mean±**		17.9	7.35±	12.4±	7.6±	10.1±	12.2±	10.1±	11.3±	11.4±	16.5±	10.1±	8.6±
	SEM			1.45	3.7	2.4	1.06	0.93	0.83	1.26	1	1.45	0.91	1.56
2nd *Ab Ov		16.5		7.7	11	11			12.1			8.8		

* Ab Ov = Abnormal Ovulation

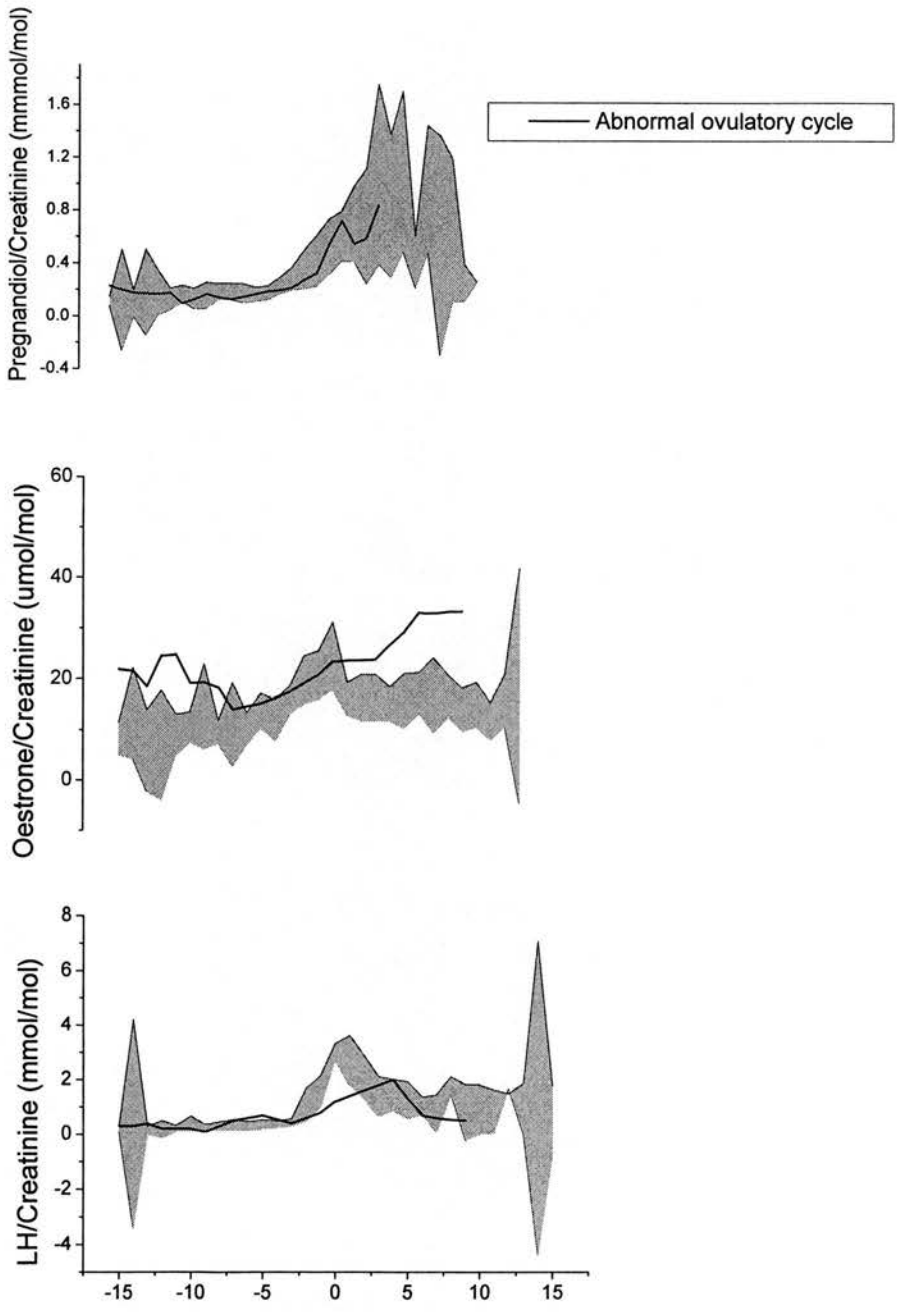


Figure 14. Comparison of the urinary hormone levels of the first woman with abnormal ovulation against the whole data reference (upper 95% & lower 95% CI) for women with ovulatory cycles in the surgical evacuation group

Table (37) Data of the 1st woman with abnormal ovulation managed by surgical evacuation

Days		**-18**	**-15**	**-12**	**-11**	**-10**	**-9**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**	**8**	**10**	**13**	**15**
LH value																					
Ovulatory	**mean±**		0.18±	0.18±	0.22±	0.38±	0.26±	0.37±	0.43±	1.08±	1.58±	2.7±	2.69±	2.07±	1.38±	1.43±	1.26±	1.13±	0.91±	0.93±	0.5±
	SEM		0.03	0.03	0.05	0.1	0.03	0.06	0.07	0.28	0.28	0.3	0.44	0.39	0.33	0.27	0.3	0.45	0.41	0.29	0.1
1st *Ab Ov			0.3	0.2	0.2	0.2	0.1		0.4			1.2			1.8						
Oestrogen E2 value																					
Ovulatory	**Mean±**		8.23±	6.85±	9.05±	10.5±	14.6±	11.9±	15.8±	19.9±	20.8±	24.5±	18.8±	16.1±	16.4±	15.1±	15.7±	16.7±	15±	18.5±	14.4±
	SEM		1	0.85	1.8	1.17	3	1.87	1.29	2.23	2.28	3.19	2.1	1.51	2.07	1.58	2.4	1.92	1.95	7.25	9.95
1st *Ab Ov			17	20	20	13	14		11			18			19						
Progesterone value																					
Ovulatory	**Mean±**		0.2±	0.17±	0.19±	0.13±	0.16±	0.21±	0.16±	0.16±	0.18±	0.25±	0.29±	0.4±	0.63±	0.67±	0.6±	0.84±	0.88±	0.97±	0.8±
	SEM		0.05	0.05	0.03	0.01	0.01	0.04	0.02	0.02	0.02	0.03	0.04	0.03	0.08	0.07	0.12	0.1	0.13	0.4	0.49
1st *Ab Ov			*1.8*	*1.00*	*1.1*	*1.3*	*0.5*		*0.3*			*0.1*			*0.5*						
Follicular growth		**-18**	**-15**	**-12**	**-11**	**-10**	**-9**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**	**8**	**10**	**13**	**15**
Ovulatory	**Mean±**					0	8.3	7.3	16±	17.8±	17.9±	18.5±	21.4±	16.9±	7.29±	8.76±	11.7±	9.8±	6.7±	7.67±	0
	SEM								1.53	1.26	1.55	0.87	3.04	2.74	2.43	3.87	3.2	5	3.84	4	
1st *Ab Ov		14.4	22.1	24.5	26.3	25.9	25.3														
Double Endometrial Thickness					**-11**	**-10**	**-9**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**					
Ovulatory	**Mean±**					4.6		5.85±	7.75±	8.44±	7.93±	11.6±	7.69±	7.95±	7.86±	9.93±	7.75±				
	SEM							0.85	0.54	0.5	0.97	2.93	0.89	1.15	1	2.2	0.15				
1st *Ab Ov			6.7	9.4	8.7	11.5	9.2														

* Ab Ov = Abnormal Ovulation

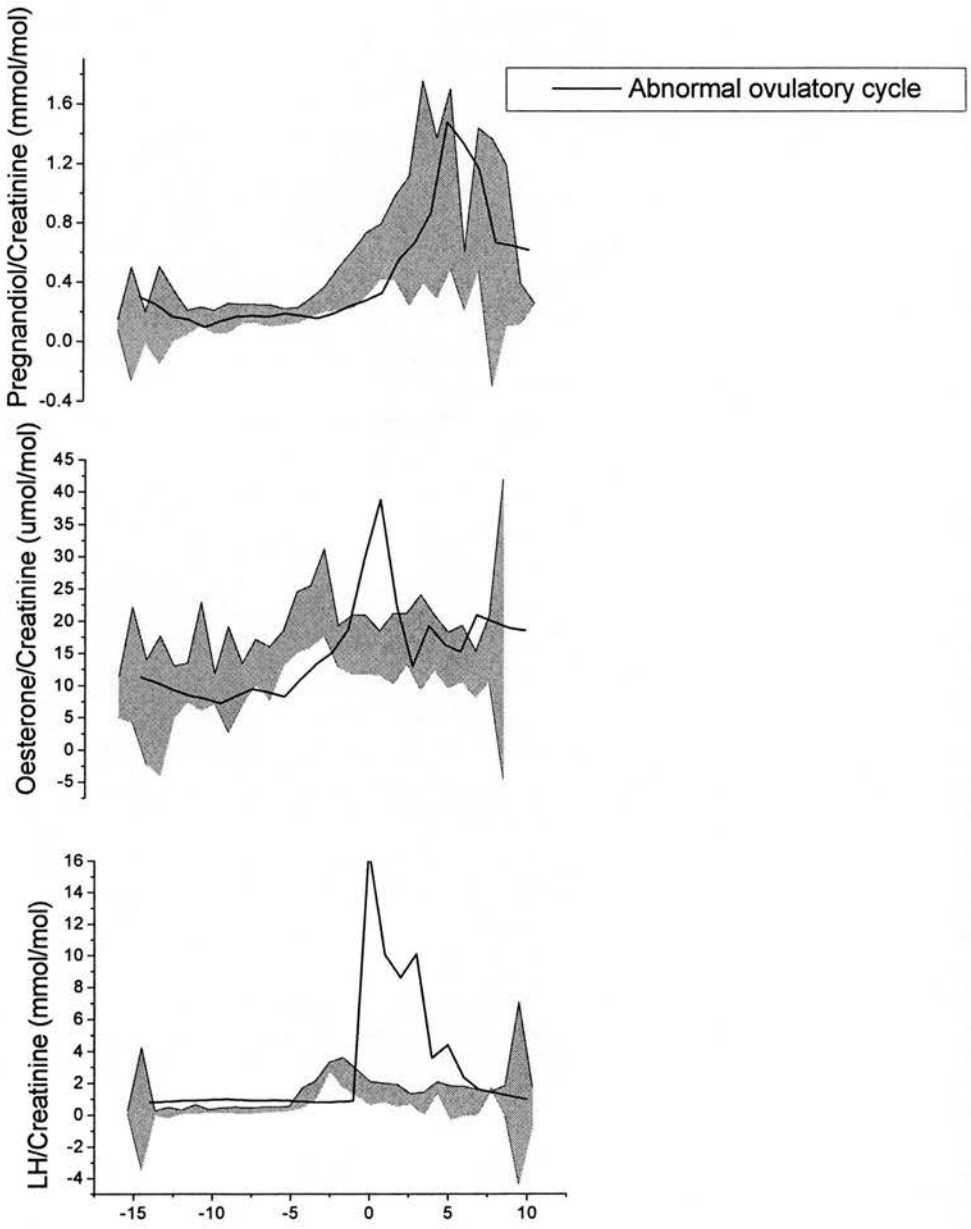


Figure 15. Comparison of the urinary hormone levels of the second woman with abnormal ovulation against the whole data reference (upper 95% & lower 95% CI) for women with ovulatory cycles in the surgical evacuation group.

Table (38) Data of the 2nd woman with abnormal ovulation managed by surgical evacuation

Days		-17	-15	-12	-9	-5	-4	-3	-2	-1	0	1	2	3	4	8	12	15
LH value																		
Ovulatory	**mean±**	0.1	0.18	0.18	0.26	0.36	0.37	0.43	1.08	1.58	2.7	2.69	2.07	1.38	1.43	1.13	0.83	0.5
	SEM		0.03	0.03	0.03	0.08	0.06	0.07	0.28	0.28	0.3	0.44	0.39	0.33	0.27	0.45	0.29	0.1
2nd *Ab Ov		2.1		0.9	1.0	0.9		0.8		0.9	16.7	10.0	8.6	10.1	3.6			
Oestrogen E2 value																		
Ovulatory	**Mean±**	9.1	8.23	6.85	14.6	13.7	11.9	15.8	19.9	20.8	24.5	18.8	16.1	16.4	15.1	16.7	15.8	14.4
	SEM		1	0.85	3	1.58	1.87	1.29	2.23	2.28	3.19	2.1	1.51	2.07	1.58	1.92	2.22	9.95
2nd *Ab Ov		16.4		9.4	7.3	8.3		13.4		18.7	29.7	38.8	22.3	13	19.2			
Progesterone value																		
Ovulatory	**Mean±**	0.39	0.2	0.17	0.16	0.19	0.21	0.16	0.16	0.18	0.25	0.29	0.4	0.63	0.67	0.84	0.63	0.8
	SEM		0.05	0.05	0.01	0.04	0.04	0.02	0.02	0.02	0.03	0.04	0.03	0.08	0.07	0.1	0.08	0.49
2nd *Ab Ov		0.43		0.09	0.06	0.04		0.04		0.06	0.09	0.14	0.22	0.28	0.33			
Follicular growth		**-17**	**-15**	**-12**	**-9**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**8**	**12**	**15**
Ovulatory	**Mean±**				7.3	16.5	16	17.8	17.9	18.5	21.4	16.9	7.29	8.76	11.7	6.7	12	
	SEM					4.16	1.53	1.26	1.55	0.87	3.04	2.74	2.43	3.87	3.2	3.84		
2nd *Ab Ov		27.4	50.2	28.7	13.5													
Double Endometrial Thickness					**-9**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**			
Ovulatory	**Mean±**					5.9	5.85	7.75	8.44	7.93	11.6	7.69	7.95	7.86	9.93	7.75		
	SEM						0.85	0.54	0.5	0.97	2.93	0.89	1.15	1	2.2	0.15		
2nd *Ab Ov		6.3	9	7.6														

* Ab Ov = Abnormal Ovulation

Table (39) Data of the anovulatory cycle in women managed by conservative management

1	6	9	12	14	17	19	20	21	22	23	25	26	28	29
Days														
Sample Number	1	4	7	9	12	14	15	16	17	18	20	21	23	24
LH	0.15	0.2	0.15	0.1	0.15	0.2	0.1	0.3		0.1	0.1	0.15	0.1	
E2	11.2	12.9	19.5	21.8	30.5	36.2	31.3	29.3		25.9	25.0	21.5	13.6	
P4	0.58	0.38	0.27	0.17	0.15	0.17	0.17	0.18		0.14	0.17	0.16	0.12	
			15.15		21.85	22.6		26.9				27.25		28
Follicular Growth														
Double Endometrial Thickness					9	7.5		8.7				7.9		5.5

Table (40) Data of the anovulatory cycle in women managed by conservative management

Days	1	2	5	8	10	12	14	15	16	17	18	19	20	21	22
LH		0.25	0.1	0.15	0.4	0.15	0.2	0.2	0.25	0.25	0.3	0.15	0.15	0.15	
E2		15.1	16.0	17.8	23.4	23.6	28.2	22.0	25.1	31.0	28.8	28.1	25.5	22.6	
P4		0.33	0.39	0.26	0.28	0.31	0.35	0.51	0.60	0.57	0.57	0.55	0.43	0.36	
Follicular growth						18.9		27.55		24.7		34.6			29.45
Double Endometrial Thickness						14.8		12.5		13.8					9.4

Table (41) Characteristics of women who desired to become pregnant in the two management groups

	Conservative (n = 103)	**ERPC (n = 76)**
Age in years, mean (SEM)	28 (0.6)	28 (0.5)
†Gestational age in days, median (Range)	72 (1.3)	73 (1.4)
Maximum AP diameter in mm, median (Range)	28 (1.1)	25 (0.9)
***Volume of tissues in cc^3, median(Range)**	20 (1.9)	17 (1.9)
***Gestational sac volume in cc^3, median (Range)**	6 (1.1)	7 (1.5)
Mean sac diameter in mm, median (Range)	23 (1.2)	22 (1.2)

*Volumes were measured using the following formula D1 x D2 x D3 x 0.523

† Gestational age was calculated from the first day of the last menstrual period in the index pregnancy, which ended up in miscarriage.

No significant difference between conservative and surgical evacuation groups

Table (42) Groups of women who were not followed up in relation to their reproductive performance

	Conservative Management **(n = 161)**	Surgical Evacuation **(n = 122)**
Women did not desire to become pregnant	(23) 14.3%	(16) 13%
Women moved from the area	(4) 2.4%	(6) 5%
Women lost to contact	(31) 19.3%	(24) 20%
Total	(58) 36%	(46) 38%

Table (43) Reproductive performance in the randomised groups

	Randomised	
	Conservative Management (n = 161)	**Surgical Evacuation (n = 122)**
Number trying & contactable	(103/161) 64%	(76/122) 62%
Number of women pregnant	(94/103) 91%	(72/76) 95%
Number of pregnancies	102	77
Number of women achieved one pregnancy	86	69
Number of women achieved two pregnancies	8	4
Number of women achieved three pregnancies	0	0
*Miscarriage (%)	(18/102) 18%	(13/77) 17%
*TOP (%)	(2/102) 2%	(6/77) 8%
†Ongoing (%)	(17/103) 17%	(15/76) 19.7%
†ANC elsewhere (%)	(2/103) 2%	(4/76) 5%
†Live birth (%)	(60/103) 58%	(38/76) 50%
†IUD (%)	0	(1/76) 1%
†Ectopic (%)	(3/103) 3%	0

* Percentages are given in relation to the total number of pregnancies achieved in the corresponding group

† Percentages are given in relation to the total number of women who desired to become pregnant

Figure 16. Rate at which successful women achieved pregnancies

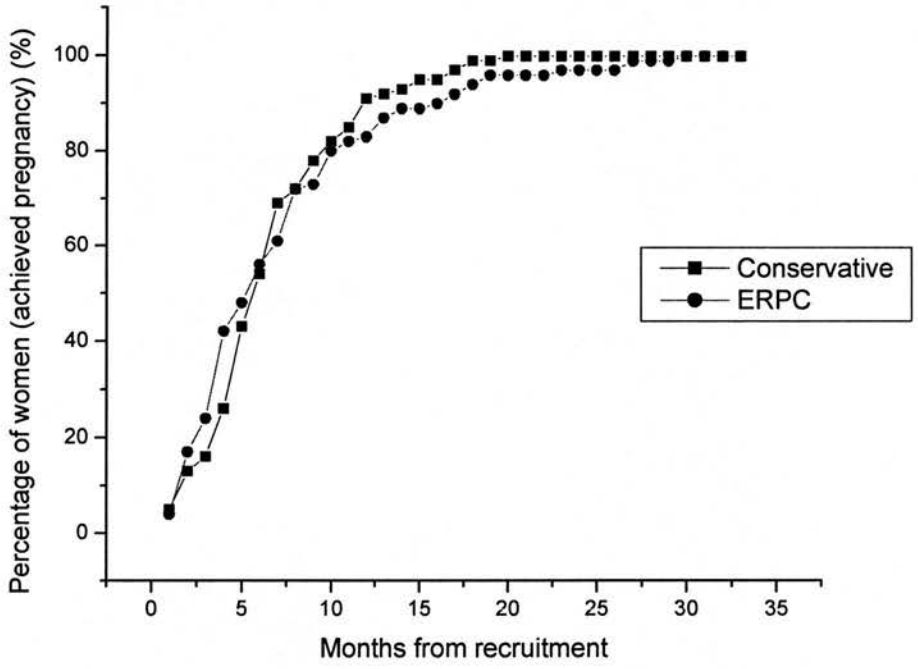


Table (44) Reproductive performance in incomplete and nonviable miscarriages who were randomised and desired to become pregnant

	Randomised	
	Nonviable pregnancy	**Incomplete miscarriage**
Number trying & contactable	(78/125) 62%	(25/36) 69%
Secondary Infertility	(4/78) 5%	(5/25) 20%
Number of women pregnant	(74/78) 95%	(20/25) 80%
Number of pregnancies	81	21
Number of women achieved one pregnancy	67	19
Number of women achieved two pregnancies	7	1
Number of women achieved three pregnancies	0	0
*Miscarriage	(14/81) 17%	(4/21) 19%
*TOP	(2/81) 2.5%	(0) 0%
†Ongoing	(16/78) 21%	(1/20) 5%
†ANC elsewhere	(2/78) 3%	(0) 0%
†Live birth	(44/78) 56%	(16/20) 80%
†Ectopic	(3/78) 3.8%	0
Time till Pregnancy in days	156 (25 –537)	168 (0 – 591)

* Percentages are given in relation to the total number of pregnancies achieved in the corresponding group

† Percentages are given in relation to the total number of women who desired to become pregnant

Table (45) Reproductive performance in women managed conservatively who required periods of expectancy > 14 days or required surgical evacuation (Failed)

	Randomised Conservative	
	>14 days expectancy period (n = 18)	**Failed (n = 11)**
Number lost to contact	(2/18) 11%	(2/11) 18%
Number moved from the area	0	0
Number not desiring to become pregnant	(5/18) 28%	(3/11) 27%
Number trying & contactable	(11/18) 61%	(6/11) 55%
2ry infertility	(2/11) 18%	(1/6) 17%
Number of women pregnant	(9/11) 82%	(5/6) 83%
Number of pregnancies	10	6
Number of women achieved one pregnancy	8	4
Number of women achieved two pregnancies	1	1
Number of women achieved three pregnancies	0	0
Miscarriage (n)	3	1
TOP (n)	0	0
Ongoing (n)	1	2
ANC elsewhere (n)	0	1
Live birth (n)	5	2
IUD (n)	0	0
Ectopic (n)	1	0

Table (46) Reproductive performance in women managed conservatively who had periods of management > 14 days and those with period of management ≤14 days.

	Conservative Randomised	
	>14 days of expectancy period (n = 24)	**≤14 days of expectancy period (n = 137)**
Number lost to contact	(3/24) 12.5%	(28/137) 20%
Number moved from the area	(1/24) 4%	(3/137) 2%
Number not desiring to become pregnant	(5/24) 21%	(18/137) 13%
Number trying & contactable	(15/24) 62.5%	(88/137) 64%
Secondary infertility	(3/24) 1%	(6/88) 7%
Number of women pregnant	(3/15) 20%	(82/88) 93%
Number of pregnancies since miscarriage	13	89
Number of women achieved one pregnancy	11	75
Number of women achieved two pregnancies	1	7
Number of women achieved three pregnancies	0	0
*Miscarriage (n)	(3/13) 23%	(15/89) 16.8%
*TOP (n)	0	(2/89) 2%
†Ongoing (n)	(3/12) 25%	(14/82) 17%
†ANC elsewhere (n)	(1/12) 8%	(1/82) 1%
†Live birth (n)	(5/12) 42%	(55/82) 67%
†IUD (n)	0	0
*Ectopic (n)	(1/13) 7.6%	(2/89) 2%

No statistically significant differences between the two subgroups were observed at all the different outcomes.

* Percentages are given in relation to the total number of pregnancies achieved in the corresponding group

† Percentages are given in relation to the total number of women who desired to become pregnant

Table (47) Reproductive performance in non-randomised groups

	Chose their management	
	Conservative (n = 31)	**Surgical (n = 54)**
Not trying	2	2
Moved from the area	0	0
Lost contact	9	20
Number trying & contactable	20	32
2ry infertility	0	0
Number of women pregnant	20	32
Number of pregnancies	21	36
Number of women achieved one pregnancy	19	30
Number of women achieved two pregnancies	1	0
Number of women achieved three pregnancies	0	2
Miscarriage	7	8
TOP	0	2
Ongoing	5	6
ANC elsewhere	0	1
Live birth	7	18
IUD	0	0
Ectopic	1	1
Vesicular Mole	1	0
Length of the period of observation (Median) days	576 (185 – 1091)	579 (172 – 1039)
Time till 1st pregnancy (Median) in days	107 (57 – 485)	132 (26 – 890)

Table (48) Resources used by women managed by surgical uterine evacuation as compared to women managed conservatively

Episode	Prefer surgical management (n = 54)	Prefer conservative management (n = 31)	Randomised to surgical management (n = 122)	Randomised to expectant management (n = 161)
*Total cost of consultations	£ 2533 54@47	£ 1625 31@52	£ 4989 122@41	£ 9010 161@56
**Cost of traveling to the hospital to receive treatment & for the treatment of complications.	£ 205 routine 54@3.8 £ 27 7@3.8	£ 121 routine 31@3.9 £ 30 8@3.75	£ 436 routine 121@3.6 £ 7 2@3.5	£ 63 routine 17@3.7 £ 74 20@3.7
† Estimated Cost of time taken to recover and return to work.	£ 13677 54@5.89x43	£ 8764 31@5.89x48	£ 25495 122@5.89x35.48	£ 40966 161@5.89x43.2
†† Other costs	£ 568 54@10.5	£ 187 31@6.0	£ 985 122@8.0	£ 1755 161@10.9
Total Cost	£ 17010	£ 10727	£ 31912	£ 51868
Average Cost per woman	£ 315	£ 346.0	£ 261.6	£ 322.1

- Most of the figures representing the cost of a certain episode are approximated to the nearest pound.

*Total cost of consultations = travelling expenses and estimated cost of time taken from work to attend the consultations.

** Cost of travelling to receive treatment or for treatment of complications was assessed directly by asking women during the visits

†This cost was calculated in relation to the time taken off work following recruitment and until the return to work. It was assumed that all women lost wages and there was no paid sick leave

††Other = cost of child minding, analgesia, sanitary towels or any other costs that could not be generalized for the whole group.

Table (49) Costing of Evacuation of Products of Conception from the Uterus

Theatre & Recovery Time @ £260 per hour Includes Anaesthetist @ £34 2 D nurses @ 20 pounds per hour O.D.A @ £9 pounds per hour	£ 130
Theatre consumables/ drugs	£ 20
Gynaecologist – Registrar @ 22 per hour	£ 11
Gynaecology Ward Cost @ 146 per day	£ 88
Dilatation and Vacuum aspiration tray	£ 18
Histopathology Specimen	£ 25
Total	£292

Notes:
1) Theatre & Recovery time calculated at 30 minutes in average

2) Day Case ward cost is calculated as 60% of the cost of whole day stay.

Costing of Gynaecology Day Case

Nursing	£41
Medical	£11
Other Direct Costs (i.e., supplies)	£4
Laundry	£3
Catering	£2
Overheads	£27
Total	£88

Table (50) Resources used by NHS for women managed by surgical uterine evacuation as compared to women managed conservatively

Episode	Prefer surgical management (n = 54)	Prefer conservative management (n = 31)	Randomised to surgical management (n = 122)	Randomised to expectant management (n = 161)
Initial Outpatient Visit				
Staff	**£812.7 0@2.6 54@15.05**	**£441.65 2@2.6 29@15.05**	**£1836.1 0@2.6 122@15.05**	**£2099.35 26@2.6 135@15.05**
FBC ± Group and save	**£720.9 54@13.35**	**£413.85 31@13.35**	**£1628.7 122@13.35**	**£2149.35 161@13.35**
HCG	**£182.52 54@3.38**	**£104.78 31@3.38**	**£412.36 122@3.38**	**£544.18 161@3.38**
HVS, Endocervical & chlamydia swabs	**£1359.18 54@25.17**	**£780.27 31@25.17**	**£3070.74 122@25.17**	**£4052.37 161@25.17**
Cost of scans	**£1620 54@30**	**£930 31@30**	**£3660 122@30**	**£4830 161@30**
CRP	**£610.2 54@11.3**	**£350.3 31@11.3**	**£1378.6 122@11.3**	**£1819.3 161@11.3**
Treatment	**£61.01**	**£9.68**	**£121.72**	**£101.7**
Total Initial Outpatient Visit	**£5367**	**£3031**	**£12108.2**	**£15596**
Routine Follow-up Visits				
Staff	**£1231.7 *113@10.9**	**£806.6 *74@10.9**	**£2430.7 *223@10.9**	**£3913.1 *359@10.9**

FBC	**£299.45** ***113@2.65**	**£196.1** ***74@2.65**	**£590.95** ***223@2.65**	**£948.7** ***358@2.65**
HCG	**£381.94** ***113@3.38**	**£250.12** ***74@3.38**	**£753.74** ***223@3.38**	**£1210.04** ***358@3.38**
HVS, Endocervical & chlamydia swabs	**£2844.21** ***113@25.17**	**£1862.58** ***74@25.17**	**£5587.74** ***222@25.17**	**£9010.86** ***358@25.17**
Cost of scans	**£3390** ***113@30**	**£2220** ***74@30**	**£6630** ***221@30**	**£10740** ***358@30**
CRP	**£1276.9** ***113@11.3**	**£836.2** ***74@11.3**	**£2519.9** ***223@11.3**	**£4045.4** ***358@11.3**
Total Routine Follow-up visits	**£9424**	**£6172**	**£18513**	**£29868**
Routine Inpatient Treatment				
Staff	**£5799** **51@52±52.5** **3@104±52.5**	**£104** ***2@52±52.5** ***0@104±52.5**	**£13424** **107@52±52.5** **16@104±52.5**	**£2135** ***29@52±52.5** ***3@104±52.5**
Theatre Cost	**£6831** **54@126.5**	**0** **0@126.5**	**£15180** **120@126.5**	**£759** **6@126.5**
Hotel cost	**£1953** **51@36** **3@39**	**£72** ***2@36** ***0@39**	**£4404** **107@36** **16@39**	**£1161** ***29@36** ***3@39**
Investigations	**£1404** **54@26**	**£78** **3@26**	**£3146** **121@26**	**£338** **13@26**
Inpatient medications				
Total Routine inpatient treatment	**£15987**	**£254**	**£36154**	**£4393**
Inpatient Management of Complications				
Staff	**£626.5** ***5@52±52.5** ***1@104±52.5**	**£989.5** ***2@52±52.5** ***3@104+52.5** ***2@208+52.5**	**£365** **3@52±52.5** **1@104+52.5**	**£2553.5** ***19@52±52.5** ***10@104+52.5**

Theatre Cost	**£632.5** **5@126.5**	**£379.5** **3@126.5**	**£253** **2@126.5**	**£1391.5** ***11@126.5**
Hotel cost	**£219** **5@36** **1@39**	**£345** ***2@36** ***5@39**	**£147** **3@36** **1@39**	**£1038** ***19@36** ***9@39**
Investigations	**£130** **5@26**	**£130** **5@26**	**£52** **2@26**	**£390** **15@26**
Inpatient medications	**£157.12**	**£39.62**	**£367.86**	**£389.66**
Total Inpatient Management of complications	**£1765.12**	**£1883.62**	**£1184.9**	**£5763**
Community Care				
Cost of consultations	**£555**	**£300**	**£1245**	**£1305**
Cost of medications	**£32.28**	**£22.89**	**£32.64**	**£40.14**
Total Cost to Community	**£587.28**	**£322.89**	**£1277.64**	**£1345.14**
Total	**£33130.4**	**£11663.51**	**£69237.74**	**£56965.14**
Average Cost per Woman	**£613.53**	**£376.24**	**£567.52**	**£353.82**

* number of episodes or days

Table (51) Adjusted Resources used by NHS for women managed by surgical uterine evacuation as compared to women managed conservatively

Episode	Prefer surgical management (n = 54)	Prefer conservative management (n = 31)	Randomised to surgical management (n = 122)	Randomised to expectant management (n = 161)
Initial Outpatient Visit				
Staff	**£812.7 0@2.6 54@15.05**	**£441.65 2@2.6 29@15.05**	**£1836.1 0@2.6 122@15.05**	**£2099.35 26@2.6 135@15.05**
FBC ± Group and save	**£720.9 54@13.35**	**£413.85 31@13.35**	**£1628.7 122@13.35**	**£2149.35 161@13.35**
HVS, Endocervical & chlamydia swabs	**£1359.18 54@25.17**	**£780.27 31@25.17**	**£3070.4 122@25.17**	**£4052.37 161@25.17**
Cost of scans	**£1620 54@30**	**£930 31@30**	**£3660 122@30**	**£4830 161@30**
Treatment	**£61.01**	**£9.68**	**£121.72**	**£101.7**
Total Initial Outpatient Visit	**£ 4573.79**	**£ 2575.95**	**£ 10316.92**	**£ 13232.77**
Routine Follow-up visits				
Staff		**£ 588.6 *54@10.9**		**£ 2594.2 *238@10.9**
FBC		**£ 143.1 *54@2.65**		**£ 630.7 *238@2.65**
HVS, Endocervical & chlamydia swabs		**£ 1359.18 *54@25.17**		**£ 5590.46 *238@25.17**
Cost of scans		**£ 1620 *54@30**		**£ 7140 *238@30**

Total Routine Follow-up visits		**£ 3710.88**		**£ 15955.36**
Routine inpatient treatment				
Staff	**£5799** **51@52±52.5** **3@104±52.5**	**£104** ***2@52±52.5** ***0@104±52.5**	**£13424** **107@52±52.5** **16@104±52.5**	**£2135** ***29@52±52.5** ***3@104±52.5**
Theatre Cost	**£6831** **54@126.5**	**0** **0@126.5**	**£15180** **120@126.5**	**£759** **6@126.5**
Hotel cost	**£1953** **51@36** **3@39**	**£72** ***2@36** ***0@39**	**£4404** **107@36** **16@39**	**£1161** ***29@36** ***3@39**
Investigations	**£1404** **54@26**	**£78** **3@26**	**£3146** **121@26**	**£338** **13@26**
Inpatient medications				
Total Routine inpatient treatment	**£15987**	**£254**	**£36154**	**£4393**
Inpatient Management of Complications				
Staff	**£626.5** ***5@52±52.5** ***1@104±52.5**	**£989.5** ***2@52±52.5** ***3@104+52.5** ***2@208+52.5**	**£365** **3@52±52.5** **1@104+52.5**	**£2553.5** ***19@52±52.5** ***10@104±52.5**
Theatre Cost	**£632.5** **5@126.5**	**£379.5** **3@126.5**	**£253** **2@126.5**	**£1391.5** ***11@126.5**
Hotel cost	**£219** **5@36** **1@39**	**£345** ***2@36** ***5@39**	**£147** **3@36** **1@39**	**£1038** ***19@36** ***9@39**
Investigations	**£130** **5@26**	**£130** **5@26**	**£52** **2@26**	**£390** **15@26**
Inpatient medications	**£157.12**	**£39.62**	**£367.86**	**£389.66**
Total Inpatient Management of complications	**£1765.12**	**£1883.62**	**£1184.9**	**£5763**

Community Care				
Cost of consultations	**£555**	**£300**	**£1245**	**£1305**
Cost of medications	**£32.28**	**£22.89**	**£32.64**	**£40.14**
Total Cost to Community	**£587.28**	**£322.89**	**£1277.64**	**£1345.14**
Total	**£ 22913.19**	**£8746.84**	**£ 48933.46**	**£40689.27**
Average Cost per Woman	**£ 424.3**	**£ 282.16**	**£ 401.09**	**£ 252.73**