CHAPTER 2

2.0 LITERATURE REVIEW ON VESICO UTERINE FISTULA/UTEROVESICAL FISTULA

2.1 INTRODUCTION

Utero-vesical fistula is an abnormal communication between the bladder and the uterus.It is one of the least common acquired urogenital fistula with prevalence of 1-4% [ibache, Njoku 1985 cited by Waqar, Sanwar 2008] and until recently around 800 cases have been reported in the world literature. The disease presents with vagina urinary leakage, cyclic Heamauria [menouria] amenorrhoea, infertility and first trimester abortions. Caesarean section the most frequent cause of this fistula present in almost 88% cases [Jozwik, Lotocki, 1997 in waqar et al 2008]

Fistula between the bladder and genital tract most commonly occur between the vagina and bladder but vesico-uterine fistula is a very rare genitourinary fistula.

Uterovesical fistula are rarely seen, fistula which develop between the uterus and bladder following caesarean section [Rao, Dwivedi, Dalta, Vyas, Nandy Trivedi et al 2006]. Increasing rates of caesarean section in recent years have also led to an increase in post operative complication in genitourinary fistula [Keralti, Tinar, Ozturk, Oztekin 2012].

The main symptom is urinary incontinence in the early post operative period but patient may present months or years later with cyclic haematuria [menouria], amenorrhoea and urinary tract infection.

Clinical presentations of uterovesical fistulas demonstrate variations. The patient can complain of urinary incontinence, amenorrhoea, and cyclic haematuria. Besides they can

hormonal treatment can be successful for the treatment of vesicouterine fistula with a small well epitheliazed orifice [Molina et al 1989 in Fertiat 2003] .But a large fistula variably necessitates surgical closure [Hemal, Wadhwa et al 1994) in ferhat 2003)

Open bladder surgery to repair a fistula is recommended when the bladder is densely adherent to the lower uterine segment (Lenkovsky, pode , Shapiro 1988 in ferhal 2003) because of low probability of pregnancy after surgical repair a fistula is the best choice of treatment particularly for multiparous patient.

2.2 **INCIDENCE**

From 1908 to 1947, only 92 cases were reported in the world literature. Since then almost 800 cases have been reported to date [Yip, leung 1998 cited by Waqar et al 2008].

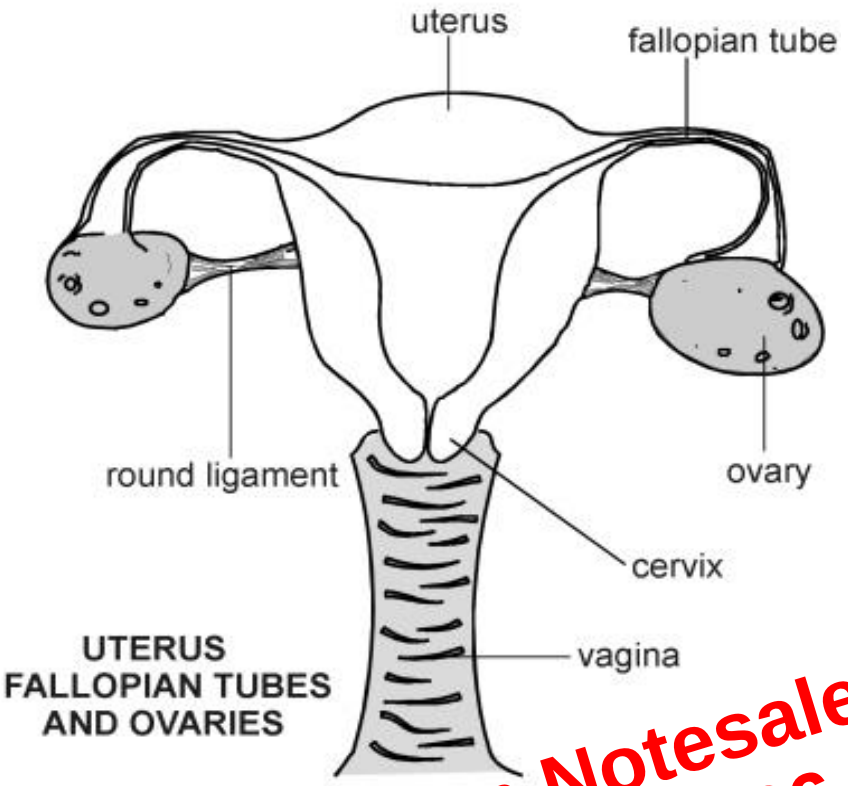
All uterovesical fistulae are latrogenic and 87% occur after lower segment caesarean section [LSCS]. Incidence rises with caesarean section (Nquira, Feki, et al 2005).

Vesicouterine fistula is a rare complication of gynaecological procedures representing only 1-4% of all urogenital fistulas (Lenkovsky et all 1988 cited by ferhat 2003)

Caesarean section is the most common cause for vesico-uterine fistula. It is used to be responsible for 83.92% of all vesico-uterine fistulas. Spontaneous healing is in 5% of cases.

This protrudes through the anterior wall of the vagina, opening it at the external Os.

DIAGRAM OF THE UTERUS



STRUCTURE OF THE UTERUS

The walls of the uterus are composed of three layers of tissue; Perimetrium, Myometrium and Endometrium.

PERIMETRIUM-This is peritoneum which is distributed differently on the various surfaces of the uterus.

Anteriorly it lies over the fundus and the body where it is folded on to the upper surface of the urinary bladder. This fold of peritoneum forms the vesicouterine pouch.

These originate from the posterior wall of the cervix and vagina and extend backward, one on each side of the rectum to the sacrum

TRANSVERSE LIGAMENT

This extends forward from the transverse cervical ligament on each side of the cervix and to the side wall of the pelvis

FUNCTION OF THE UTERUS

It helps to receive the fertilized ovum from the fallopian tube

It helps to contain and nourish the embryo and the foetus

It helps to protect the foetus during its development

It expels the fetus at term through the vagina to the outside as a result of the powerful contraction of the myometrium

It is greatly involved in the menstrual cycle

2.3.2 UTERINE TUBES

The uterine tubes are about 10cm long and extend from the side of the uterus between the body and the fundus. They lie in the upper free free border of the broad ligament and their trumpet shaped lateral ends penetrate the posterior wall. Opening into the peritoneal cavity close to the ovaries, the end of each tube has finger like projections called fimbriae. The longest of these is the ovarian fimbriae which is in close contact with the ovary

In some cases, menouria can be associated with urinary leak through the vagina (Jozwik, Jozwik 2000). The symptoms can appear early after surgery or month or even years later (lenkovsky et al 1988)

2.5 AETIOLOGY/PREDISPOSING FACTORS

- Most cases of vesicouterine fistula occurs after a caesarean section/delivery
- It may be associated with endometriosis
- Contraceptive device e.g. intrauterine contraceptive device
- Malignant tumour
- Rupture of the uterus and bladder after obstructed labour especially if prolonged and neglected

Other less common causes include:

- Forceps delivery
- Inadvertent catheter penetration of bladder during delivery
- Manual removal of placenta with past caesarean section
- After uterine artery embolization for leimyoma uteri
- Injury to the bladder wall
- Tuberculosis of the genital tract

2.6 CLINICAL MANIFESTATION

- Urinary incontinence may or may not be present

CHAPTER THREE

3.1 PATIENT'S BIODATA

NAME:	Mrs M.D
AGE:	37years
DATE OF BIRTH:	07/05/1979
SEX:	female
RELIGION:	Christianity
NATIONALITY:	Nigeria
STATE OF ORIGIN:	Kaduna State
ADDRESS:	Lagos state, Nigeria
NAME OF NEXT OF KIN:	Mr F.M
RELATIONSHIP:	Son
ADDRESS OF NEXT OF KIN:	Same as patient's address
ALLERGIES:	Opium derivatives and Tramadol
WARD:	Gynaecology Ward
HOSPITAL NO:	113279
DIAGNOSIS:	Vesicouterine Fistula
CONSULTANT:	Dr A.

SLEEP AND REST

Patient sleep is adequate and light. Usual sleep time is 9- 10Pm, Usual Wake Time is 5am

COMMUNICATION/SPECIAL SENSES

Patient communicates well in Hausa, Kataf, English, and slightly in Yoruba. All special senses are intake, nil abnormality

FEELING ABOUT SELF

Patient verbalized reduction in her quality of life but believes everything will be well after surgical repair of the fistula

FAMILY AND SOCIAL RELATIONSHIP HISTORY

Patient is from a divorced home, the last of 4 children. Parents are dead but relates well with them when they were alive. Also relates well with siblings

Family history of Asthma and Hypertension (maternal)

SEXUALITY AND REPRODUCTION

Patient is a gravida 6 para 5,5Alive (G6P5). Usually menstruate for 3days with moderate flow

Patient is not currently sexual active due to the present disease condition. Says husband is understanding

COPING WITH STRESS

Patient copes well with stress, sleeps most times when stressed

VALUES AND BELIEF

Patient is a Christian

4.3 OBSERVATION CHART FOR MRS M.D

DATE	TIME	TEMP (℃)	RESPIRATION	PULSE	BLOOD PRESSURE(MmHg)	REMARKS
21/5/17	6pm	37	86c/m	20b/m	110/70	Satisfactory
	6am	36.6	86c/m	20b/m	120/80	Satisfactory
	10am	36.4	84c/m	18b/m	110/70	Satisfactory
	2pm	36.6	84c/m	22b/m	120/80	Satisfactory
	6pm	36.8	82c/m	20b/m	110/70	Satisfactory
22/5/17	6am	36.6	94c/m	22b/m	100/70	Satisfactory
	10am	37	88c/m	20b/m	120/80	Satisfactory
	2pm	36.6	84c/m	18b/m	100/70	Satisfactory
	6pm	36.7	94c/m	22b/m	110/80	Satisfactory
23/5/17	6am	36.5	90c/m	20b/m	110/70	Satisfactory
	10am	36.6	88c/m	20b/m	120/70	Satisfactory
	2pm	36.4	84c/m	24b/m	110/80	Satisfactory
	6pm	36.8	90c/m	22b/m	100/80	Satisfactory
24/5/17	6am	36.8	84c/m	20b/m	120/70	Satisfactory
	10am	36.6	86c/m	20b/m	120/80	Satisfactory
	2pm	37	84c/m	20b/m	120/80	Satisfactory
	6pm	36.3	84c/m	22b/m	120/70	Satisfactory
25/5/17	6am	36.7	82c/m	22b/m	110/80	Satisfactory
	10am	36.9	80c/m	24b/m	110/70	Satisfactory
	2pm	36.4	82c/m	20b/m	120/80	Satisfactory

	6pm	36.7	84c/m	24b/m	110/70	Satisfactory
26/7/17	6am	35.6	82c/m	22b/m	100/80	Patient was covered
	10am	36.8	88c/m	26b/m	120/70	Satisfactory
	2pm	36.6	80c/m	24b/m	110/80	Satisfactory
	6pm	36.6	82c/m	22b/m	100/60	Satisfactory
27/7/17	6am	36.7	86c/m	22b/m	110/70	Satisfactory
	10am	36.4	82c/m	22b/m	110/80	Satisfactory
	2pm	36.8	80c/m	24b/m	120/70	Satisfactory
	6pm	36.2	84c/m	20b/m	120/80	Satisfactory
28/5/1	6am	36.4	82c/m	24b/m	120/80	Satisfactory
	10am	37	86c/m	22b/m	110/70	Satisfactory
	2pm	36.8	82c/m	18b/m	120/80	Satisfactory
	6pm	37	88c/m	20b/m	110/80	Satisfactory
29/5/17	6am	36.6	86c/m	22b/m	110/80	Satisfactory
	10am	36.6	86c/m	20b/m	130/70	Satisfactory
	2pm	36.8	86c/m	18b/m	120/70	
	6pm	37	82c/m	20b/m	120/70	Satisfactory
		36.7	88c/m	20b/m	120/80	Satisfactory
30/5/17	6am	36.4	90c/m	22b/m	110/70	Satisfactory
	10am	36.5	88c/m	22b/m	120/80	Satisfactory
	2pm	36.3	86c/m	20b/m	110/70	Satisfactory
	6pm	36.8	86c/m	24b/m	110/80	Satisfactory
31/5/17	6am	36.6	88c/m	22b/m	120/70	Satisfactory

ROUTE OF ADMINISTRATION: orally.

SIDE EFFECT: Very rare.

CONTRAINDICATION: NIL.

NURSING RESPONSILBLITY: serve the correct dose.

4.9 RECOMMENDA TION

1. Public should be educated on how to identify risk factors, prevent occurrence and complication of the disease
2. Government should organize awareness programs to sensitize citizens, to enlighten them about the disease and the importance of early presentation to the hospital
3. Women with this condition should be promptly and duly cared for because of complications like low self esteem, reduction in quality of life
4. Necessary emergency resources should be available in all facilities to be used in emergency delivery of an obstructed labour hence preventing complications like this (vesicouterine fistula)
5. Pregnant women should be encouraged to go for antenatal care early and at an appropriate and well equipped hospital