## Journal of Kufa for Nursing Science Vol. (3) No.(3) 2013

## **Anal Fissure among Female in Erbil City**

# الشق الشرجي عند الإناث في مدينة أربيل

\*Bahjat Ahmed Mohammad/ MBChB, MSc General Surgery /College of Nursing/ Hawler Medical University

#### لخلاصة.

الأهداف: هذه دراسة وصفية أجريت لتقييم حالات الفطر الشرجي بين النساء في مدينة اربيل و ضواحيها، الفطر الشرجي هو مشكلة شائعة بين النساء اكثر مما هو في الرجال، وهو تقرح خطي في النصف الأسفل من القنات الشرجية الواقعة في الجدار الخلفي والوسطى.

المنهجية: جمعت المعلومات من 500 حالة للفترة الممتدة من ايار 2010- الى ايار 2012 من خمسمائة مريض اجروا مقابلة والفحص السريري وتم تسجيل المعلومات السريرية وكانت تتضمن العمر ، محل الإقامة، الوظيفة، الحالة الاجتماعية، عدد الأطفال نوع وموقع فطر الشرجي وكذلك الأعراض المصاحبة والعلاج ورجوع الفطر بعد العلاج مرة أخرى. بالإضافة الى ذلك تم احتساب الفترة الزمنية بين ظهور أول عرض للمرض ومراجعة المربضة للطبيب لغرض العلاج.

بين ظهور أول عرض للمرض ومراجعة المريضة للطبيب لغرض العلاج. النتائج: الفطر الشرجي حالة متكررة بين النساء القادرات على الحمل وأظهرت النتائج من مجموع الحالات 76.8% منهم كانوا متزوجات و23.3% كانوا غير متزوجات.

الاستنتاج: عدد الأطفال ومكان الولادة والعوامل الاجتماعية والتعليمية هي من العوامل المشاركة في تطور المرض. التوصيات: يجب زيادة التوعية الاجتماعية لهذه المشاكل ومضاعفاتها.

#### Abstract:

**Objectives**: to identify the causes of the fissure in ano among child bearing age female in Erbil city because it is very common in the Kurdistan.

**Methods**:- This prospective study of evaluation of fissure in ano among female patients in Erbil city and its surrounding for the period between may 2010 and may 2012, Data collected from 500 cases showed that fissure in ano is most common cause of ano-rectal pain in this locality among child bearing age females from clinic ,Erbil teaching hospital and Erbil gynecological hospital All the patients were interviewed and clinical data were recorded including; age, occupation, marital state, number of children, types of fissure in ano, sites of fissure, associated symptoms, its treatment and recurrence. Period from first onset of symptoms to first medical consultation were recorded and showed that most of them were delayed.

**Results**: from 500 cases showed that fissure in ano is most common cause of ano-rectal pain in this locality among child bearing age females from clinic ,Erbil teaching hospital and Erbil gynecological hospital.

**Conclusion**: the fissure in ano is the most common disease among female childbearing age and usually due to bad post natal care

**Recommendation**: for prevention of this painful condition I advice the gynaecologist and obstetrician to do peri anal care.

Keywords:- fissure, ano, female.

## INTRODUCTION

An anal fissure is a linear ulcer of the lower half of the anal canal usually located in the posterior commissar in the midline <sup>(1, 2, 3)</sup>. Location may vary; an anterior midline fissure is seen more often in women although most fissures in both sexes reside in the posterior midline. Characteristic associated finding include a sentinel pile or tag externally and enlarged anal papilla internally <sup>(1)</sup>. Fissure away from this two locations should raise the possibility of associated disease especially Chron's disease hidradinitis supperativa or malignant conditions <sup>2</sup>. Fissure in ano is often a painful condition especially with defecation and may cause bleeding per rectum. The diagnosis is secured by typical history of pain and bleeding during defecation, if associated with prior constipation and confirmed by inspection after gently parting the posterior anus digital as well as proctoscopic examination may trigger sever pain <sup>1, 2, 4</sup>.

### **OBJECTIVES:**

To identify the causes of the fissure in ano among child bearing age female in Erbil city because it is very common in the Kurdistan.

#### PATIENTS AND METHODS

A prospective study done for evaluation of 500 female patients with fissure in ano they attend private clinic and Erbil Teaching Hospital for assessment and treatment. The study was conducted from clinic, Erbil teaching hospital and Erbil gynecological hospital, during the period between May 2010 and May 2012. All the patients were diagnosed clinically and evaluation of the causes of anal fissure were assessed, clinical data were recorded including; age, marital state, number of children, place of delivery, residence and occupation, type of fissure and its location, 259 of patients underwent operation, biopsy samples of 50 cases send for histopathology examination.

#### **RESULTS:**

Table (1) Demographical distribution of the studied patients

| × / 3            | Variables            | Number | Percentage |
|------------------|----------------------|--------|------------|
| Age (years)      | 1 -10                | 29     | 5.4%       |
|                  | 11-20                | 34     | 7.4%       |
|                  | 21-30                | 201    | 40%        |
|                  | 31-40                | 127    | 25.4%      |
|                  | 41-50                | 62     | 12.4%      |
|                  | 51 and above         | 47     | 9.4%       |
|                  | Total                | 500    | 100%       |
| Marital status   | Married              | 384    | 76.8%      |
|                  | Unmarried            | 116    | 23.2%      |
|                  | Total                | 500    | 100%       |
| Residence        | Inside Erbil (urban) | 106    | 21.2%      |
|                  | Outside Erbil(rural) | 394    | 78.8%      |
|                  | Total                | 500    | 100%       |
| Occupation       | House wife           | 398    | 79.6%      |
|                  | Working outside home | 102    | 20.4%      |
|                  | Total                | 500    | 100%       |
| Number of        | 1-3                  | 56     | 11.2%      |
| children         | 4-5                  | 267    | 53.4%      |
|                  | More than 5          | 177    | 35.4%      |
|                  | Total                | 500    | 100%       |
| Site of delivery | Home Delivery        | 345    | 69%        |
|                  | Hospital Delivery    | 155    | 31%        |
|                  | Total                | 500    | 100%       |

Table 1 reveals that Out of 500 patients, 200 of them were at age group (21-30) year, (76.8%) of them were married. Majority of cases were from rural area surrounding Erbil city (78%), while (21.2%) of them were from urban area. (79.6%) were Housewife, while (20.4%) of them were doing their work outside their home. Majority of them are childbearing age and had more than three children. And the study showed that those female who had 1-3 children were (11.2%) of the total cases,

and those females who had more than five children were about (35.4%). Most of the deliveries were occurred at home (69%) while 31% of the patients were delivered in hospital.

Table (2) Duration between starting the symptoms and the starting treatment:

| Duration           | Number of patients | Percentage |
|--------------------|--------------------|------------|
| Less than one year | 145                | 29%        |
| 1-5 years          | 238                | 47.6%      |
| More than 5 year   | 117                | 23.4%      |
| Total              | 500                | 100%       |

Table (2) shows that for less than one year (29%) of the cases keep their symptoms secret, (47.65%) of them keep their symptoms secret for (1-5) year and (23.4%) of them keep their symptoms secret for more than five years

Table (3): Frequency of associated symptoms in the studied patients

| Associated symptoms  | Number of patients | Percentage |
|----------------------|--------------------|------------|
| Anal pain            | 500                | 100%       |
| Bleeding per rectum  | 275                | 55%        |
| Constipation         | 321                | 64.2%      |
| Abdominal pain       | 153                | 30.6%      |
| Abdominal distention | 45                 | 9%         |

Table (3) shows that The most common sign and symptoms associate with this condition is anal and perianal pain (100%) followed by constipation in 64% of the cases then bleeding per rectum in 55% of them, abdominal pain was found in 30% and abdominal distention was found in 9% of them.

Table (4): Distribution of the location and type of fissure in the studied patients

| Tuble (4). Distribution of the focution and type of historic in the studied patients |                   |                    |            |
|--|-------------------|--------------------|------------|
| Fissure location and   | type              | Number of patients | Percentage |
| Location of fissure  | Anterior midline  | 258                | 51.6%      |
|  | Posterior midline | 240                | 48%        |
|  | Lateral           | 2                  | 0.4%       |
|  | Total             | 500                | 100%       |
| Type of fissure  | Acute             | 57                 | 11.4%      |
|  | Acute on chronic  | 124                | 24.8%      |
|  | Chronic           | 319                | 63,8%      |
|  | Total             | 500                | 100%       |

Table (4) shows anterior type is more common than posterior type; it shows that (51.6%) of the studied patients were posterior type, 48% of them were anterior type, and only 0.4% of them were lateral type. The chronic anal fissure was observed in (63.8%) of the studied patients while only (11.4%) of cases were acute and the remaining (24.8%) were acute or chronic.

Table (5): Frequency of types of treatment and operation

|            | Treatment                       | Number | Percentage |
|------------|---------------------------------|--------|------------|
| Types of   | Conservative treatment          | 241    | 48.2%      |
| treatment  | Operative treatment             | 259    | 51.8%      |
|            | Total                           | 500    | 100%       |
| Type of    | Lord dilatation                 | 202    | 77.99%     |
| operations | Partial lateral Sphinecterotomy | 57     | 22.01%     |
|            | Total                           | 257    | 100%       |
| Results of | Carcinoma of rectum             | 2      | 4%         |
| Biopsies   | Non specific inflammation       | 46     | 92%        |
|            | Crhon's disease                 | 2      | 4%         |
|            | Total                           | 50     | 100%       |

Table (5) shows that out of 500 patients, 259 (77.99%) of them were operated under general anesthesia, lord dilatation technique was performed in 88% of the cases, partial lateral sphenecteratomy was performed in (22%) of them. The rest treated conservatively (241 cases) from those were operated only 50 cases were sent for histopathology examination and the result was none specific chronic inflammations in 48 cases, two cases were Crhon's disease and other two were carcinoma of anal canal

Table (6): frequency of recurrences after operation of 259 patients underwent operation

| Recurrence | Number of patients |  |
|------------|--------------------|--|
| No         | 195                |  |
| Yes        | 64                 |  |
| Total      | 259                |  |

### **DISCUSSION:**

Anal fissure is common problem in females, in the present study the common age affected was between (21-30) years, however in other studies done in USA and Europe were between 40 and 60 years  $^{2,5,11}$ .

Majority of the cases (78%) of anal fissure were female living in rural area, similarly with other studies done in India in which approximately the same result, however in developed countries such as UK the incidence was not much difference between urban and rural area <sup>5,7,9</sup>.

The number of child bearings is closely related to the prevalence of anal fissure in other study <sup>4</sup>, (15%) were affected with child bearing of (1-3) children, 33% in female with 4-5 children and 50 over 5 children, however in other study shown in UK that majority of cases of anal fissure occurred in first and 2<sup>nd</sup> delivery <sup>1,6</sup>.

Delivery outside the hospital are associated with high incidence of anal fissure shown our study, (72%), compare with other study which (52 %) in Europe <sup>9,10</sup>.

Social status has shown great impact on the chronic disease of anal fissure in our society, female are unlikely to see a doctor during early appearance of symptoms, (23%) visited doctor after one year, and (47%) after five years whereas in (95%) visited their GP in early appearance of the symptoms, only (0.1%) of the patients visited their doctors after (5) years in a study done in Europe  $^{1,3}$ .

Perianal pain were common symptom in all cases, constipation in (64%) of them and bleeding in (55%) of them these data were comparable with results of a study performed in Europe <sup>3,7</sup>.

Out of total 54% of the cases were anterior fissure which is common than posterior (41%) of them.

In conclusion; there are many factors has been contributed with appearance of illness and chronic of illness in this study, these are; the number and place of delivery, social and educational factors. It is recommended to increase social awareness of such a problematic and complicated disease and providing more health service special to people not living in the city and good post natal care.

### **CONCLUSION:**

The fissure in ano is the most common disease among female childbearing age and usually due to bad postnatal care.

#### **RECOMMENDATION:**

Advise the gynaecologist and obstetrician to do peri anal care by good washing and doing anal dilatation by zylocain gel to prevent painful condition

### **REFERENCES**

- 1- R.C.G Russell, Norman S. Williams & Christopher J. K. Bulstrode. Baily & loves short practice of surgery 24<sup>th</sup> edition 2004. Chapter 72 Pages 1253
- 2- Courtney M. Townsend, JR, M.D-R. Danil B eauchamp. M. D. Sabiston Textbook of surgery 17<sup>th</sup> edition. Year, 2009 chapter 49 page 1491
- 3- F.Charles Brunicardi Dana K. Andersen. Schwartz's principles of surgery 2005; 8<sup>th</sup> edition. Chapter 28, page 1103
- 4- Janet Weber & Jane Kelley, health assessment in nursing 2008 third edition chapter 23 page 531
- 5- Gott, M. D.; Peter, H. (5 March 1998). "New Therapy Coming for Anal Fissures". The Fresno Bee (Fresno, CA: McClatchy Co). p. E2, "Life" section.
- 6- Sullivan PB, Lambert B, Ford-Adams M, Griffiths P, Johnson A. (2000). The prevalence and severity of feeding and nutritional problems in children with neurological impairment: Oxford Feeding Study. Developmental Medicine & Child Neurology 42: 674–80.
- 7- Basson, Marc D. (28 January 2010). "Constipation". eMedicine. NewYork, NY: WebMD. Retrieved 5 April 2010.
- 8- Watson, S.; Kamm, M.; Nicholls, R.; Phillips, R. (1996). "Topical Glyceryl Trinitrate in the Treatment of Chronic Anal Fissure". British Journal of Surgery 83 (6): 771–775.
- 9- Thomson JPS, Nicholls RJ, Williams CB. Anal Fissure in *colorectal diseases*. London: William Heinemann Medical Book Limited; 1981. p. 312.
- 10- The Standard Task Force American Society of Colon and Rectal Surgeons, author. Practice Parameters for the Management of Anal Fissure. Dis Colon Rectum. 1992;32:206–208
- 11- Maturanza M, Maitato F, Costanzo A, Pavero R, Battistini G, Minerva Combined outpatient surgical -cryotherapeutic treatment of anal fissures. Our experience. Minerva Chir. 1997 Apr;52(4):393–395.