Contribution of Iatrogenic Cause to Female Genital Fistula Burden in a New Classification System

GO SANDA¹, BA DIAGNE², SM GUEYE³, A HARISSOU¹, A SOUMANA¹

¹Hôpital national de Lamordé, Niamey, Niger, ²Hôpital Aristide Le Dantec, ³Hôpital général de Grand Yoff, Dakar, Sénégal., Presenting Author: GO Sanda; E-mail: oumarousanda@gmail.com
Objectives

- To propose a consensual classification for Female genital Fistulae
- To identify types of iatrogenic genitourinary fistulae, circumstances of occurrence & diagnostic tools
- To assess the surgical treatment outcomes
Increasing interest amongst female genital fistula
Stakeholders to understand the growing incidence of iatrogenic fistula
Prospective study & Literature Review:
- 300 patients registered
- June 2011-June 2014
- Hôpital National de Lamordé (Niger)
- National Referral Center for Fistula (Niger)

-HINARI, PubMed & Medline Classification Review

J. Marion Sims
Hamlin Fistula Center
Waaldjik K
Goh J
Tafesse B
Ouattara K
Diagne BA
- Prospective study: 72 of 724 fistula patients
  Jan 2009 - Sep 2015 at both sites

- **Diagnosis:** history, symptoms, clinical exam, dye test, imaging, endoscopy

- **Surgery:** transvesical or transperitoneal route:
  - 47 bladder fistula
  - 20 ureteric fisula
    - Ureteric reimplantation
    - Boari flap
    - Ureteral anastomosis
  - 4 Urethral reconstruction
  - 1 vaginoplasty
RESULTS for Closure and Continence

7.7% lost to follow-up at 3 months
95.37% successful closure
89.6% closed and continent
Continence range:
100% type I to 23% type III C.
iatrogenic fistula anatomy

- retro trigonal, vesico-uterus
- vesico-utero-cervico-vaginal
- uretero-vaginal
- urethra-vaginal
Fig. 1 “condom cystoscopy”
Fig. 2 Condom Cystoscopic view of vesico-uterine fistula. Transperitoneal-vesical suture

Fig. 3 IVP: Uretero-vaginal fistula. End to end anastomosis
# Table I. Iatrogenic fistula cases

<table>
<thead>
<tr>
<th>Types of fistula</th>
<th>Context of occurrence</th>
<th>Nbr of fistula</th>
<th>Symptoms</th>
<th>Diagnostic tools</th>
<th>Surgical routes</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vesico-cervico-uterus</td>
<td>C-section hysterectomy</td>
<td>42</td>
<td>Urine leakage thru cervix vagina, menoury</td>
<td>Condom cystoscopy/ (blue, indigo-carmin)</td>
<td>Transvesical/ transperitoneal</td>
<td>success</td>
</tr>
<tr>
<td>Ureter-vaginal</td>
<td>C-section /hysterectomy</td>
<td>20</td>
<td>Urine leakage thru vagina, normal micturitions, flank pain</td>
<td>Cystoscopy/ indigo carmin, IVP</td>
<td>Transperitoneale/ transvesical</td>
<td>success</td>
</tr>
<tr>
<td>Trigono-vaginal</td>
<td>C-section</td>
<td>5</td>
<td>Urine leakage thru vagina</td>
<td>Condom cystoscopy</td>
<td>transvesical</td>
<td>success</td>
</tr>
<tr>
<td>Urethro-vaginal</td>
<td>Forceps/yankan gishiri</td>
<td>5</td>
<td>Urine leakage thru vagina</td>
<td>Gynecologic Examen</td>
<td>vaginal</td>
<td>success (3), failure (2)</td>
</tr>
</tbody>
</table>
Discussion

**Mean age:** 27 yrs ± 6 yrs (23-56 yrs)

*Bouya et al > 55% patients < 30 yrs*

*Kazadi Buanga et al : younger*

**Iatrogenic fistula rate Niger:**

72 iatrogenic of 724 fistula = 9.9%

*Raassen et al, Dapang: 13.5-16%*
• **Iatrogenic fistula**: an issue with significant concerns for treatment & prevention

• **Causes**: CS, hysterectomy, instrumental
  - Are yankan gishiri complications iatrogenic or traumatic?

• Situation to be addressed in curricula development

• Promote prevention thru:
  - use ureteral stents before planned pelvic surgery
  - qualified EMOC & Gyn competency-based training