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

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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
Background

Increasing interest amongst female genital fistula
Stakeholders to understand the growing incidence of iatrogenic fistula
Patients, materials & methods

- 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
  Waaldijk 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
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.
- retro trigonal, vesico-uterus
- vesico-utero-cervico-vaginal
- uretero-vaginal
- urethra-vaginal
Fig. 1 “condom cystoscopy”
Fig. 2 Condom Cystoscopic view of vesico-uterine fitula. 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>Uretero-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
Fistula Care Plus Partners