SSA Hepatology Working Group
Guidance for Screening and treatment of HCC in SSA
Friday 1 December 2017- Vineyard Hotel, CAPE TOWN

Working Group on liver surgery in SSA

- Country: CAMEROON

Christian TZEUUTON
Oumarou NANA
• Dr Oumarou Nana is:
  – Lecturer University of Yaounde 1
  – General, digestive and hepato biliary surgeon
  – Laparoscopic surgery
HBV Infection

Diagram showing the progression of HBV infection over time:

- **Normal Liver**
- **Chronic Hepatitis**
- **Cirrhosis**
- **HCC ESLD (End-stage liver disease)**

- **20-25 years**
- **25-30 years**

- HBV Infection rates:
  - 75-85%
  - 20-30%
  - 2-7% per year


THOMTON Karla – Lesson 2 - University of New-Mexico - 2015
Virus B = Oncogenic

ALCOHOL (AFLD)

NAFLD - NASH

Others

5% 65% 8% <5%

CIRRHOSIS

CANCER

Virus C

20%
L'incidence du CHC en Afrique sub-saharienne est variable en fonction des régions (par 100 000 personnes/an)

<table>
<thead>
<tr>
<th>Région</th>
<th>Incidence CHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afrique de l'Ouest</td>
<td>20,9</td>
</tr>
<tr>
<td>Afrique de l'Est</td>
<td>29,7</td>
</tr>
<tr>
<td>Afrique centrale</td>
<td>41,2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cause</th>
<th>Incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis B</td>
<td>65%</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>20%</td>
</tr>
<tr>
<td>Alcohol</td>
<td>8%</td>
</tr>
<tr>
<td>Metabolic Syndr</td>
<td>5%</td>
</tr>
<tr>
<td>Aflatoxine</td>
<td>&lt; 5%</td>
</tr>
</tbody>
</table>

Incidence du cancer du foie dans le monde: Variation régionale

*Age standardized

Institution

- Teaching facility:
  - Yaounde University Teaching Hospital
  - Yaounde General Hospital
  - Essos Hospital Center
  - Douala General Hospital

- Affiliated University: University of Yaounde 1

- Number of beds in hospital/surgical beds:

<table>
<thead>
<tr>
<th></th>
<th>Cameroon hospitals</th>
<th>Dr Oumarou</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital beds</td>
<td>??</td>
<td>240</td>
</tr>
<tr>
<td>Surgical beds</td>
<td>??</td>
<td>40</td>
</tr>
<tr>
<td>Size of Population served</td>
<td>23 millions</td>
<td>3 millions</td>
</tr>
</tbody>
</table>

- No dedicated HPB service.
Liver surgery performed by HPB surgeons and/or general surgeons: yes

Number of surgeons performing liver surgery: around 7

Number of resections performed per year:
- Only 1-3: (other few patients treated abroad)
- Other patients: end stages → Palliative treatments
## Diagnostic capabilities

<table>
<thead>
<tr>
<th></th>
<th>State</th>
<th>Private</th>
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</thead>
<tbody>
<tr>
<td>Ultrasound</td>
<td>32</td>
<td>129</td>
</tr>
<tr>
<td>CT</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>MRI</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>PET</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
## Treatment options available

<table>
<thead>
<tr>
<th></th>
<th>State</th>
<th>Private</th>
<th>Where</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resection</strong></td>
<td>rare</td>
<td>No</td>
<td>India, South Africa</td>
</tr>
<tr>
<td><strong>Ablation</strong></td>
<td>rare</td>
<td>No</td>
<td>France, Tunisia, Morrocco</td>
</tr>
<tr>
<td><strong>TACE/TAE</strong></td>
<td>No</td>
<td>No</td>
<td>No trans arterial chemoembolisation</td>
</tr>
</tbody>
</table>
Affiliations

• We have affiliations with other institutions or training facilities outside your country:
  – French University Teaching Schools
  – Belgian University Teaching Schools
  – OESO in Switzerland

• Cooperation: Foreign teams in Douala and Yaoundé for 2 to 3 weeks
National

- Number of institutions offering liver surgery: 12
- Rough estimate of number of surgeons performing liver surgery/intervention: 26
Specific problems

- Shortage of surgeons: very few very trained HPB surgeons
- Theatre facilities
- Equipment: not enough good anesthesists
- ICU facilities: not enough equipments,
- Many patients seen too late:
  - No surgical solution
  - Even no chemotherapy solution,
  - Palliative procedures only
  - Traditional healers +++++
AFRICAIN Context

Traditionnal healers
Conclusion

- Screening (risk groups, cirrhotic patients, …)
- Early diagnosis
- More good HPB surgeons
- Modern equipments and ICUs
- Continuous medical training
- Prevention: eradication HBV and HCV (WHO ➔ 2030)