FAILURE TO DIAGNOSE ORAL CANCER AND OTHER PATHOLOGIC CONDITIONS OF THE ORAL CAVITY

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Fellow, American College of Legal Medicine
Fulbright Alumnus (Scholar, University of Lagos, 2010-2011)

Fear of being sued as a physician/dentist is real, although putting this “fear” in context is helpful!

RESULT OF SURVEY OF 1705 LAWSUITS*

<table>
<thead>
<tr>
<th>Disposition of Suit</th>
<th>Number (% of Cases)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dropped by Plaintiff</td>
<td>513 (30)</td>
</tr>
<tr>
<td>Settled Out of Court</td>
<td>460 (27)</td>
</tr>
<tr>
<td>Suit Pending</td>
<td>260 (15)</td>
</tr>
<tr>
<td>Jury Verdict for Physician</td>
<td>182 (11)</td>
</tr>
<tr>
<td>Dismissed by Judge</td>
<td>171 (10)</td>
</tr>
<tr>
<td>Resolved by Arbitration and Mediation</td>
<td>66 (4)</td>
</tr>
<tr>
<td>Jury Verdict Against Physician</td>
<td>53 (3)</td>
</tr>
</tbody>
</table>


Conclusion: Majority of lawsuit threats do not materialize, and the majority of those that do are decided in favor of the physician.

ORAL CANCER: Other Epidemiologic Facts

- Individuals 45 years of age and over – 90 percent
- Tongue cancer increasing in males <40 years old
- 14th most common cancer among all U.S. females
- Male to female ratio has decreased from 6:1 in 1950 to 1:8:1
- Incidence in women has increased from 15% to 33% of all cancers diagnosed in last 45 years

ORAL CANCER: A significant Public Health Concern

- Over 90% are oral squamous cell carcinoma (OSCC)
- About 33,000 new cases in the U.S. annually
- Represents 5% (m=3; f=2) of all malignancies in the U.S.
- Survival rate essentially unchanged over three decades: 50%
- Early treatment: 5YSR = 80%
- Up to 50% mortality in advanced cases
- Recurrent disease may signal non-curability

Conclusion: Majority of lawsuit threats do not materialize, and the majority of those that do are decided in favor of the physician.


ORAL CANCER: A significant Public Health Concern

- Occur more frequently in African-Americans than Caucasians
  - 4th most common cancer in African-American males
- Oral cancer mortality rates are also high for African-Americans
  - Nearly twice the mortality rate of Caucasians in 1998.
  - Oral cancer is the 7th leading cause of cancer death in African American men

ETIOLOGIC AGENTS

- Tobacco products
- Alcohol
- Viruses (Particularly HPV)
- Others

THE ORAL CAVITY

“The Oral Cavity is one of very few body sites conducive to visual inspection thereby offering morphological features detectable as precancerous changes that provide opportunity for early detection and intervention.”

THE ORAL CAVITY is easily accessible for routine clinical examination.

ORAL CANCER: Missed Diagnosis; Misdiagnosis

- The incidence of missed diagnosis and misdiagnosis relatively high compared to cancers of other regions of the GI tract
  - Diagnosis of Oral Premalignant Lesions (OPL) still present challenges
- Non-standardized and archaic paradigm still in use for clinical diagnosis

ORAL PREMALIGNANT LESIONS (OPL): Misdiagnosis?

- *Leukoplakia*
- *Speckled Leukoplakia*

*Clinical terms implying no specific histopathology and therefore of no pathological diagnostic value

MISSED DIAGNOSIS: Premalignant Lesion (precancer)

LESIONS WITH HIGHER THAN NORMAL PROPENSITY FOR TRANSITION TO CANCERS WITH TIME, IN THE ABSENCE OF ADEQUATE INTERVENTION

MISSED DIAGNOSIS: Premalignant Lesion (precancer)

- Diagnosis of Oral Premalignant Lesions (OPL) still present challenges
- Non-standardized and archaic paradigm still in use for clinical diagnosis

Erythroplakia: a red patch/plaque not attributable to any known etiology/diagnostic entity.

Could be mistaken for inflammatory cause (e.g. trauma) leading to delayed diagnosis.
**ORAL CANCER: Who is at risk for malpractice litigation?**

- Dentists: all specialties
  - Failure to diagnose
- Oral and Maxillofacial Surgeon
  - Misdiagnosis/Mismanaged
- ENT
  - Misdiagnosis/Mismanaged
- Oral and Maxillofacial Pathologist
  - Misdiagnosis/Failure to Diagnose

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**SUBGROUP ANALYSIS**

Subgroup Analysis. GP = general practice; DDS/OS = dentist/oral surgeon; ENT/HNS = otolaryngologist/head and neck surgeon.

<table>
<thead>
<tr>
<th>TABLE III. Subgroup Analysis.</th>
<th>GP</th>
<th>DDS/OS</th>
<th>ENT/HNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subgroup Analysis.</td>
<td>10</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Total suits</td>
<td>10</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Average age (y)</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Failure to diagnose</td>
<td>10%</td>
<td>15%</td>
<td>18%</td>
</tr>
<tr>
<td>Failure to refer</td>
<td>30%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Failure to biopsy</td>
<td>20%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Delay (mos)</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hospital care</td>
<td>10%</td>
<td>15%</td>
<td>18%</td>
</tr>
<tr>
<td>Dead</td>
<td>40%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Patient death</td>
<td>30%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Settlement received</td>
<td>20%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Settlement received</td>
<td>20%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Plaintiff verdict</td>
<td>40%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Plaintiff awarded</td>
<td>30%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Average award</td>
<td>$250,000</td>
<td>$750,000</td>
<td>$500,000</td>
</tr>
</tbody>
</table>
  - Awards over $300,000: 0 0 0

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**COMMON PERSPECTIVES FOR LAWSUITS**

- Oncologic outcomes
- Patients Age

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**SPECIALTIES**

Cancer of the Oral Cavity and Medical Malpractice. 

| TABLE III. Specialties. | Cancer of the Oral Cavity and Medical Malpractice. 
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anesthesiology</strong></td>
<td>1/47 (2%) General practice (GP) 11/47 (23%)</td>
</tr>
<tr>
<td><strong>Dentist (DDS)</strong></td>
<td>17/47 (36%) Pathology 1/47 (2%)</td>
</tr>
<tr>
<td><strong>Oral surgeon (OS)</strong></td>
<td>4/47 (9%) Radiation oncologist (RO) 1/47 (2%)</td>
</tr>
<tr>
<td><strong>Total dental</strong></td>
<td>21/47 (45%) Head and neck surgeon (HNS) 1/47 (2%)</td>
</tr>
<tr>
<td><strong>Otolaryngologist (ENT)</strong></td>
<td>8/47 (17%) Dermatologist 3/47 (8%)</td>
</tr>
</tbody>
</table>
COMMON PERSPECTIVES FOR LAW
SUITs: Oncologic outcome

Cancer of the Oral Cavity and Medical Malpractice.

| TABLE I: Findings When Comparing Suits From the Perspective of Oncologic Outcome. |
|---------------------------------|-----------------|-----------------|
|                                | Dev.            | NED             |
| Average age (y)                | 50              | 41              |
| Failure to diagnose            | 96%             | 77%             |
| Failure to biopsy              | 48%             | 38%             |
| Failure to refer               | 39%             | 15%             |
| Surgical complication          | 0%              | 23%             |
| Delay in (mo)                  | 11              | 14              |
| Defendant verdict              | 48%             | 38%             |
| Settlement                     | 30%             | 23%             |
| Plaintiff verdict              | 22%             | 38%             |
| Average Award                  | $483,500        | $806,675        |
| $1,000,000 award               | 3               | 4               |

NED = no evidence of disease.

COMMON PERSPECTIVES FOR LAW
SUITs: Plaintiff Age

Cancer of the Oral Cavity and Medical Malpractice.

DIAGNOSTIC ADJUNCTS

- Toludine Blue
- Chemiluminescent
- "Brush" Biopsy (smear cytology)
- Biopsy
  - Incisional
  - excisional

DIAGNOSTIC ADJUNCTS: Toludine Blue

- Fast and easy office procedure
- Stain suspected malignant tissue
  - When several surface abnormalities are present
- Tissue that stains blue indicates either dysplasia or malignancy
- Pending approval in U.S.

DIAGNOSTIC ADJUNCTS: Chemiluminescent Light

- A liquid similar to diluted vinegar is applied to the area of the mouth to be screened
- Under the special light, the liquid causes pre-cancerous or cancerous cells to glow
- Approved for use in the United States but not yet widely available

DIAGNOSTIC ADJUNCTS: Brush Biopsy

- Uses small stiff-bristled brush to collect mucosal epithelial cells from a suspicious site
  - Apply firm pressure with the brush to the suspected area
  - Brush is then rotated five to ten times until pinpoint bleeding occurs
- Immediately place and fix the tissue on a slide
- Slide is subsequently sent to a laboratory for computer analysis
  - Results sent back to the practitioner within a week
DIAGNOSTIC ADJUNCTS: Biopsy

- "Gold Standard"
- Provides most definitive diagnosis
  - If malignant, determines the stage and grade
- Common oral biopsy techniques:
  - Excisional
    - Remove whole lump
  - Incisional
    - Remove a portion of the lump
  - Punch
    - 3-4mm diameter – cuts out cylindrical piece of tissue

ORAL CANCER EXAMINATION

- Can be performed by:
  - Dentist
  - Dental Hygienist
  - Physician
  - Physician’s Assistant
  - Family Nurse
  - Practitioner
  - Nurse

In malpractice lawsuits, Respondeat Superior ("Master-Servant Rule") may apply.

MISDIAGNOSIS/UNDERDIAGNOSIS OF ORAL CANCER: Summary/Conclusion

- Litigation in patients with oral cancer is relatively rare
- Young patients more likely to pursue litigation than their old counterparts
- Patients who sue often have poor oncological outcomes
- In order to prevent subsequent litigation, guidelines and risk management goals must aim to prevent delays in diagnosis.

OTHER LESIONS: Child Abuse Cases
SEXUAL ABUSE:
Forced Fellatio

SEXUAL ABUSE:
Orogenital Contact
Condyloma Accuminatum
A sexually transmitted disease resulting from Orogenital contact

CASE REPORT
A 7 year-old female with broad and papillary mandibular gingival lesion
Patient (Child) should be evaluated with that in mind.

**Diagnosis:**

Viral Papilloma, morphologically consistent with Condyloma Acuminatum.

Patient (Child) should be evaluated with that in mind.

**INTERVENTION**

As a Professionals, You **Must** Report!!!!

For Healthcare Professionals, Oral Report within 24 Hours

**INTERVENTION (2)**

- Referral
  - Child Protective Services
  - Adult Protective Services

1-800 252-5400
800 25-25 400

Good Morning
And
Thank you All Again for Listening

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