Pathology Reports in Underwriting

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Path Reports - Importance

- Microscopic examination of cells and tissue is the gold standard for diagnosis

- Often, treatment decisions depend almost exclusively on pathology (An Oncologist’s motto: “no meat, no treat”)

- Such accurate diagnosis is indispensable to underwriting decisions

- Path reports, when misleading or misinterpreted can lead to vast over- or under-estimations of mortality risk.
Objectives:

By the end of this presentation you should be able to:

- Understand the importance of pathology reports
- Know what to look for in a pathology report
  - Understand the staging and grading of cancer and how pathology reports relate to it
- Be familiar with easy-to-make mistakes and how to avoid them
- Be able to perform an autopsy and arrive at a cause of death without fainting
What is a pathologist?

- A doctor (MD or DO) who, after graduating medical school, completed a residency in pathology
  - Anatomic pathology – deals with tissue diagnosis
    - Forensic pathology
    - Dermatopathology
    - Hematopathology
  - Clinical pathology – deals with laboratory testing
    - Laboratory medicine
    - Blood banking
Path Reports - Importance

- Path reports are most important for:
  - Cancer (and lesions that may or may not be cancer)
  - Liver Disease (cirrhosis, fibrosis, etc)
  - Blood Disorders (bone marrow biopsy)
  - Kidney for certain rare conditions (glomerulonephropathies)
How Path Reports Are Generated

• A path report is generated anytime tissue is removed for diagnosis or treatment (exceptions: some cosmetic surgery, skin tags)

• Biopsy – the removal of tissue for diagnosis.
  – Excisional biopsy – the entire lesion is removed
  – Incisional biopsy – only part of the lesion is removed
  – Needle biopsy – only a core of tissue is removed
  – Punch biopsy – a punch instrument is used on the skin, can be excisional or incisional

• “Margins” – the edges of the removed tissue
  – Expected to be positive with incisional or needle biopsy
  – Expected to be negative with excisional biopsy
How Path Reports are Generated

Process:

• Tissue is removed via needle, scalpel or other method
• Fixed (put in formaldehyde-based fixative)
• Embedded in paraffin
• Sectioned (sliced thin), mounted (on a slide), stained, and examined

*Frozen Section – removed tissue is frozen (instead of embedded), mounted, stained and examined while surgery is ongoing.
How Path Specimens are Prepared
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How Path Specimens are Prepared
Additional Tests

- **Immunohistochemistry (IHC)**
  - Uses antibodies to detect certain protein antigens in the pathologic specimen
    - CD20: Identify B-cells
    - CD3: Identify T-cells
    - Estrogen and progesterone receptors

- **In situ hybridization**
  - Similar to IHC but detects DNA/RNA
    - Can detect specific genetic defects
    - Can detect viral DNA
      - HPV detection – may be useful in head and neck cancer or in cervical biopsies
Parts of Path Report

• Identifying Data (name, DOB, Referring MD)

• Accession number (e.g. SE-01-0756) The 01 is the year.

• Gross description (seen with the naked eye)

• Microscopic Description (seen via microscope after processing)

• Comments Section

• “Final” Diagnosis
How Good are These Guys?

• Usually quite good
  – Studies have shown an “error rate” of about 0.1% on blinded specimens
  – Path reports are “amended” or updated in important ways about 0.2% of the time

• However…
  – Some studies (non-blinded) show higher rates (3% or so)
    • Specialty centers reviewing outside slides
  – Some lack of standardization of reports means important information can be missing
    • Margin distance
    • Lymphatic or vascular invasion

Todd comes in today and basically he is series to be doing extremely well no major new problems or complications over the interval period time the patient is just concerned is that he needs to have at this point in time courting to the patient is warned its necessary for him with his military obligation. Basically we've looked the formal her at this point time we do not have any particular problems in dealing not the form for the patient basically just needs explanations on some positive answers or he continued to reduce questionnaire. We have filled out the form for the patient and the patient will be therefore okay at this point in time other than not the patient does not have any other major problems or complications over the interval period time paragraph past medical history scaling the finger at this point time salmon nation did not reveal any major problems.
Pathology Reports and Cancer

- Path reports are most important in oncology
  - Is it cancer or not?
  - What is the cancer Stage?
  - What is the cancer Grade?
  - What other prognostic features are present or absent
    - Lymphovascular invasion
    - Comedonecrosis
    - Regression
    - Ulceration
    - Receptors
    - Genetic defects
Pathology of Cancer

• Cancer
  – The loss of normal cellular growth control
    • Normal Cell
    • Dysplastic or atypical cell
      – Has mutations that spur abnormal growth
      – Subtle change in appearance
    • Low-grade malignant cell
      – Faster abnormal growth
      – Tumor formation
      – Further change in appearance
    • High-grade malignant cell
      – Marked change in appearance
      – High metastatic potential
Cancer - Grade
Pathology of Cancer

• Cancer continues to grow and may spread
  – Tumor may extend and infiltrate nearby organs
  – May spread via lymph channels to lymph nodes
  – May spread via blood stream to other organs (especially the lungs, liver)
  – How much the cancer has spread forms the basis of Stage
Cancer: Stage vs. Grade

Grade 1

Grade 2

Grade 3

Grade 4
Cancer Grade vs. Stage

• Grade is often expressed as Grade 1 (“well-differentiated”) to Grade 3 (“poorly differentiated”)
  – Alternatively may have a system specifically developed for that cancer
    • Nottingham Score in Breast Cancer
    • Gleason Score in Prostate Cancer
  – If you are going to find grade anywhere you will find it on the path report

• Stage is usually expressed as I (localized) to IV (widely spread)
  – This is actually an older system, now refined/replaced by the TNM system.
  – T=tumor, N=node, M=metastasis (example T2N1M0)
  – Often the various combinations of T,N and M are grouped back into the traditional I-IV system for treatment/prognosis/underwriting
  – You may see the prefix “p” as in pT2c
    • This means the stage is based on what the pathologist sees, and not on anything else
    • The prefix “c” means the stage is based on clinical and pathological information
Take Home Message

• The prognosis (risk) of each type of cancer depends on grade, stage, and a large variety of other criteria

• It is best to be familiar with these criteria (via underwriting guides) before reviewing the path report and other APS information

• With the rapid pace of new tests and treatments this information may frequently change
Avoiding Mistakes
Path Reports – Avoiding Mistakes

• MISTAKE #1 – Making a decision based on incomplete information.

• Look for more when what you have is:
  • A) a biopsy
  • B) a frozen section
  • C) margin-positive
  • D) non-diagnostic

• Lymph nodes – an essential part of staging especially with colon, breast, and melanoma (sentinel node)

• Missing features – regression and ulceration in melanoma, comedonecrosis in DCIS

• Keep in mind that many path specimens are sent for further testing or second opinions. This is becoming more common and can result in drastic changes in the diagnosis and prognosis.
• MISTAKE #2

• A biopsy shows cancer or an initial excision shows cancer with positive margins. A follow-up procedure (wide-excision or other) is negative for cancer.
  – In this instance the PI does have cancer and staging, grading and treatment decisions would be based on the biopsy specimen.
  – Note that with prostate cancer, the tumor stage would change from T1 to T2 even though no additional cancer was found.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>Clinically inapparent tumor, neither palpable nor visible by imaging</td>
</tr>
<tr>
<td>T1a</td>
<td>Tumor incidental histologic finding in 5% or less of tissue</td>
</tr>
<tr>
<td>T1b</td>
<td>Tumor incidental histologic finding in more than 5% of tissue</td>
</tr>
<tr>
<td>T1c</td>
<td>Tumor identified by needle biopsy</td>
</tr>
<tr>
<td>T2</td>
<td>Tumor confined within the prostate</td>
</tr>
</tbody>
</table>
Path Reports – Avoiding Mistakes

• Mistake #3
  – T2 is not the same as Stage 2.

<table>
<thead>
<tr>
<th>Summary Stage</th>
<th>TNM Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>TisN0M0</td>
<td>In situ, Clark level I</td>
</tr>
<tr>
<td>IA</td>
<td>T1aN0M0</td>
<td>0-1.0mm thick, Clark level II/III, no ulceration</td>
</tr>
<tr>
<td>IB</td>
<td>T1bN0M0, T2aN0M0</td>
<td>0-1.0mm thick, Clark level IV/V or with ulceration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.01-2mm thick, no ulceration</td>
</tr>
<tr>
<td>IIA</td>
<td>T2bN0M0, T3aN0M0</td>
<td>1.01-2.0mm thick, with ulceration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.01-4.0mm thick, no ulceration</td>
</tr>
</tbody>
</table>
• Mistake #4 - Barrett’s esophagus
  – Often, a GI specialist looks through an endoscope and sees a bright red lesion and may report this as “Barrett’s” before the biopsy comes back.
  • Then the path report says it’s not Barrett’s
Path Reports – Avoiding Mistakes

• Mistake #5 – confusing terms
  – The “-plasias”
    • Hyperplasia – too many normal cells
    • Metaplasia – cells are of a different type than expected (see Barrett’s)
    • Dysplasia – cells are starting to lose their normal characteristics (atypia)
  – Things that sound like cancer but are NOT:
    • Malignant hypertension, malignant hyperthermia, malignant narcissism
    • Carcinoid syndrome (usually benign, sometimes malignant)
  – Things that don’t sound like cancer but ARE:
    • Sezary syndrome, mycosis fungoides
    • Paraneoplastic syndrome
    • Waldenstrom’s macroglobulinemia
Examples
53 year old man applying for 500k of UL.

Has a history of prostate cancer first detected by elevated PSA (80 at age 49). Needle biopsy showed cancer, then had RRP.

Path report (in part):

Part 3 – prostate
Tumor present: Yes
Histologic type: Prostatic adenocarcinoma
Grade: Gleason 3+4=7
Size of tumor: 1.6x1.6cm
Margins: tumor is present at the inked resection margin in the left superior urethral margin...
Extracapsular ext: None identified
Perineural invasion: Present
Seminal vesicle invasion: Not identified
pTpNpM: pT2c pN0 pMX

Elsewhere:
Part 6 – Left bladder neck biopsy: Prostatic Adenocarcinoma
Part 7 – Right bladder neck, biopsy: prostatic and urothelial tissues, negative for tumor.
Part 8 – Left bladder neck biopsy: Prostatic Adenocarcinoma
Lesson: Be sure to incorporate all of the information you are given. Even pathologists can make mistakes.

Prostate Cancer Staging

### Pathologic (pT)³

<table>
<thead>
<tr>
<th>pT2</th>
<th>Organ confined</th>
</tr>
</thead>
<tbody>
<tr>
<td>pT2a</td>
<td>Unilateral, one-half of one side or less</td>
</tr>
<tr>
<td>pT2b</td>
<td>Unilateral, involving more than one-half of side but not both sides</td>
</tr>
<tr>
<td>pT2c</td>
<td>Bilateral disease</td>
</tr>
<tr>
<td>pT3</td>
<td>Extraprostatic extension</td>
</tr>
<tr>
<td>pT3a</td>
<td>Extraprostatic extension or microscopic invasion of bladder neck⁴</td>
</tr>
<tr>
<td>pT3b</td>
<td>Seminal vesicle invasion</td>
</tr>
<tr>
<td>pT4</td>
<td>Invasion of rectum, levator muscles, and/or pelvic wall</td>
</tr>
</tbody>
</table>

### Anatomic Stage/Prognostic Groups⁴

<table>
<thead>
<tr>
<th>Group</th>
<th>T</th>
<th>N</th>
<th>M</th>
<th>PSA</th>
<th>Gleason</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>T1a-c</td>
<td>NO</td>
<td>M0</td>
<td>PSA &lt;10</td>
<td>Gleason ≤6</td>
</tr>
<tr>
<td></td>
<td>T2a</td>
<td>NO</td>
<td>M0</td>
<td>PSA &lt;10</td>
<td>Gleason ≤6</td>
</tr>
<tr>
<td></td>
<td>T1–2a</td>
<td>NO</td>
<td>M0</td>
<td>PSA X</td>
<td>Gleason X</td>
</tr>
<tr>
<td>IIA</td>
<td>T1a-c</td>
<td>NO</td>
<td>M0</td>
<td>PSA &lt;20</td>
<td>Gleason 7</td>
</tr>
<tr>
<td></td>
<td>T1a-c</td>
<td>NO</td>
<td>M0</td>
<td>PSA ≥10&lt;20</td>
<td>Gleason ≤6</td>
</tr>
<tr>
<td></td>
<td>T2a</td>
<td>NO</td>
<td>M0</td>
<td>PSA ≥10&lt;20</td>
<td>Gleason ≤6</td>
</tr>
<tr>
<td></td>
<td>T2a</td>
<td>NO</td>
<td>M0</td>
<td>PSA &lt;20</td>
<td>Gleason X</td>
</tr>
<tr>
<td></td>
<td>T2b</td>
<td>NO</td>
<td>M0</td>
<td>PSA &lt;20</td>
<td>Gleason ≤7</td>
</tr>
<tr>
<td></td>
<td>T2b</td>
<td>NO</td>
<td>M0</td>
<td>PSA X</td>
<td>Gleason X</td>
</tr>
<tr>
<td>IIB</td>
<td>T2c</td>
<td>NO</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
</tr>
<tr>
<td></td>
<td>T1–2</td>
<td>NO</td>
<td>M0</td>
<td>PSA ≥20</td>
<td>Any Gleason</td>
</tr>
<tr>
<td></td>
<td>T1–2</td>
<td>NO</td>
<td>M0</td>
<td>Any PSA</td>
<td>Gleason ≥8</td>
</tr>
<tr>
<td>III</td>
<td>T3a–b</td>
<td>NO</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
</tr>
<tr>
<td>IV</td>
<td>T4</td>
<td>NO</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
</tr>
<tr>
<td></td>
<td>Any T</td>
<td>N1</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
</tr>
<tr>
<td></td>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
<td>Any PSA</td>
<td>Any Gleason</td>
</tr>
</tbody>
</table>

- Just the one detail of microscopic bladder neck invasion takes this from pT2c to T3a
- Stage Group goes from IIB to III
- Note: was already IIB due to PSA level
• 75 yo female applying for $1 million of permanent insurance. Has a history of melanoma in 2009

• Path report (in part):
  – Gross Examination: “Left eye”, received fresh and placed in formalin. The specimen is a left eye….It measures 25x23x23mm. 10mm of optic nerve is attached to the globe. On cutting the eye a grayish mushroom-shaped mass is noted in the choroid on the nasal side of the optic nerve. It measures 9mm in diameter and 5mm in thickness. There is no evidence of transcleral extension on gross examination.

• Rating as melanoma yields a stage of T4 – Stage IIb
  – 5 year relative survival rate is about 50-60%
## Melanoma Staging

### Primary Tumor (T)

<table>
<thead>
<tr>
<th>Classification</th>
<th>Thickness (mm)</th>
<th>Ulceration Status/Mitoses</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>≤1.0</td>
<td>a: w/o ulceration and mitosis &lt;1/mm²</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b: with ulceration or mitoses ≥1/mm²</td>
</tr>
<tr>
<td>T2</td>
<td>1.01–2.0</td>
<td>a: w/o ulceration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b: with ulceration</td>
</tr>
<tr>
<td>T3</td>
<td>2.01–4.0</td>
<td>a: w/o ulceration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b: with ulceration</td>
</tr>
<tr>
<td>T4</td>
<td>&gt;4.0</td>
<td>a: w/o ulceration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b: with ulceration</td>
</tr>
</tbody>
</table>

### ANATOMIC STAGE/PROGNOSTIC GROUPS

<table>
<thead>
<tr>
<th>Stage</th>
<th>Clinical Staging</th>
<th>Pathologic Staging</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Tis N0 M0</td>
<td>0 Tis N0 M0</td>
</tr>
<tr>
<td>IA</td>
<td>T1a N0 M0</td>
<td>IA T1a N0 M0</td>
</tr>
<tr>
<td>IB</td>
<td>T1b N0 M0</td>
<td>IB T1b N0 M0</td>
</tr>
<tr>
<td></td>
<td>T2a N0 M0</td>
<td>T2a N0 M0</td>
</tr>
<tr>
<td>IIA</td>
<td>T2b N0 M0</td>
<td>IIA T2b N0 M0</td>
</tr>
<tr>
<td>IIB</td>
<td>T3a N0 M0</td>
<td>IIB T3a N0 M0</td>
</tr>
<tr>
<td></td>
<td>T3b N0 M0</td>
<td>T3b N0 M0</td>
</tr>
<tr>
<td>IIC</td>
<td>T4a N0 M0</td>
<td>IIC T4a N0 M0</td>
</tr>
<tr>
<td>IIIA</td>
<td>Any T N1 M0</td>
<td>IIIA T1-4a N1a M0</td>
</tr>
<tr>
<td>IIIB</td>
<td>T1-4a N2a M0</td>
<td>IIIB T1-4b N1a M0</td>
</tr>
<tr>
<td></td>
<td>T1-4b N2a M0</td>
<td>T1-4b N2a M0</td>
</tr>
<tr>
<td></td>
<td>T1-4a N2b M0</td>
<td>T1-4a N2b M0</td>
</tr>
<tr>
<td></td>
<td>T1-4b N2c M0</td>
<td>T1-4b N2c M0</td>
</tr>
<tr>
<td>IIIIC</td>
<td>Any T N3 M0</td>
<td>IIIIC T1-4b N1b M0</td>
</tr>
<tr>
<td>IV</td>
<td>Any T Any N M1</td>
<td>IV Any T Any N M1</td>
</tr>
</tbody>
</table>

**NOTE:** a and b subcategories of T are assigned based on ulceration and number of mitoses per mm², as shown above.
Ocular Melanoma Staging

### Definition of Ocular Melanoma Stages

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>The tumor is 7 mm or less in diameter and is less than 2 mm in height. The tumor has not spread to distant organs.</td>
</tr>
<tr>
<td>1B</td>
<td>The tumor is 7-10 mm in diameter and is 2-3 mm in height. The tumor has not spread to distant organs.</td>
</tr>
<tr>
<td>2</td>
<td>The tumor is 10-15 mm in diameter and is 3-5 mm in height. The tumor has not spread to distant organs.</td>
</tr>
<tr>
<td>3</td>
<td>The tumor is more than 15 mm in diameter or greater than 5 mm in height. The tumor has not spread to distant organs.</td>
</tr>
<tr>
<td>4A</td>
<td>The tumor extends outside the eyeball but it has not spread to distant organs.</td>
</tr>
<tr>
<td>4B</td>
<td>The tumor may be any size, and has spread to distant organs, typically the liver.</td>
</tr>
</tbody>
</table>

### Survival Comparison

Lesson: Understand that there are different types of melanoma and over 200 types of cancer. Prognosis may vary.

Ocular melanoma survival: About 85% when confined to the eye.
A 70 yo man applying for $5 million of permanent insurance has a history of colon cancer, with hemicolecction and follow-up chemo completed 5 years ago.

Path report: “Segment of terminal ileum and right colon with an infiltrating moderately well-differentiated colonic adenocarcinoma at the ascending colon. The tumor infiltrates through the entire colonic wall into the pericolic soft tissues. Focal lymphatic and vascular invasion are seen. Resection margins are free of tumor. Multiple lymph nodes (50) are negative for tumor. The neoplasm, however, is present in perinodal soft tissues in several areas.

Questions: What stage is this? And what is the prognosis?

**Primary Tumor (T)**

- **TX**: Primary tumor cannot be assessed
- **T0**: No evidence of primary tumor
- **Tis**: Carcinoma in situ: intraepithelial or invasion of lamina propria
- **T1**: Tumor invades submucosa
- **T2**: Tumor invades muscularis propria
- **T3**: Tumor invades through the muscularis propria into pericolorectal tissues
- **T4a**: Tumor penetrates to the surface of the visceral peritoneum
- **T4b**: Tumor directly invades or is adherent to other organs or structures
Colon Cancer Staging Changes

<table>
<thead>
<tr>
<th></th>
<th>AJCC fifth edition</th>
<th>AJCC sixth edition</th>
<th>AJCC seventh edition</th>
</tr>
</thead>
<tbody>
<tr>
<td>T4</td>
<td>Tumor directly invades other organs or structures, and/or perforates visceral peritoneum</td>
<td>T4</td>
<td>The same as the fifth edition</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N1</td>
<td>Metastasis in 1 to 3 regional LNs</td>
<td>N1</td>
<td>The same as the fifth edition</td>
</tr>
<tr>
<td>N2</td>
<td>Metastasis in 4 or more regional LNs</td>
<td>N2</td>
<td>The same as the fifth edition</td>
</tr>
<tr>
<td>M1</td>
<td>Distant metastasis</td>
<td>M1</td>
<td>The same as the fifth edition</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T3 N ≤3 mm</td>
<td></td>
<td>T</td>
<td>Has irregular contour</td>
</tr>
<tr>
<td>T3 N &gt;3 mm</td>
<td></td>
<td>N</td>
<td>Has the form and smooth contour of a LN</td>
</tr>
<tr>
<td>Stage II</td>
<td>Stage II</td>
<td>Stage IIA</td>
<td>Stage IIA</td>
</tr>
<tr>
<td>T3N0M0</td>
<td>T3N0M0</td>
<td>T3N0M0</td>
<td>T3N0M0</td>
</tr>
<tr>
<td>T4N0M0</td>
<td>T4N0M0</td>
<td>T4N0M0</td>
<td>T4N0M0</td>
</tr>
<tr>
<td>Stage III</td>
<td>Stage III</td>
<td>Stage IIIA</td>
<td>Stage IIIA</td>
</tr>
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<td>Any T N1M0</td>
<td>Any T N1M0</td>
<td>T1-T2N1M0</td>
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<tr>
<td>Any T N2M0</td>
<td>Any T N2M0</td>
<td>T3-T4N1M0</td>
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<td>Stage IV</td>
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<tr>
<td>Any T Any N M1</td>
<td>Any T Any N M1</td>
<td>The same as the fifth edition</td>
<td>The same as the fifth edition</td>
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</tbody>
</table>

Then: T3N0M0 (Stage IIA), now T3N1cM0 (IIIB)
Colon Cancer Staging

• Why did this happen?
  – Between the development of the 6th and 7th editions of the cancer staging manual it was discovered that stage IIB was worse, prognostically, than stage IIIA
  – By creating the N1c category for tumor deposits outside the main tumor, some poor-prognosis stage IIB patients were moved into stage III

• Lesson:
  – Cancer staging is hard
  – Staging can change based on new studies and new information
  – Understand that prognosis can vary within a stage
A 62 year old man applying for $500,000 in UL. Has a history of skin cancer on his back that was removed 2 years ago. This is the path report. The was no reexcision and none is planned. He goes for yearly skin checks with no further problems.

**DIAGNOSIS:**

LT UPPER BACK
KERATOACANTHOMA, CONSISTENT WITH
CONSIDER AN EARLY SQUAMOUS CELL CARCINOMA
DEEP MARGIN POSITIVE. (173.5)

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**GROSS DESCRIPTION:**

Received is a shave biopsy of skin measuring 1.0 x 1.0cm.

**MICROSCOPIC DESCRIPTION:**

The changes seen in the specimen are consistent with a keratoacanthoma. Due to the nature of the biopsy, an early squamous cell carcinoma cannot be completely ruled out.
Skin Cancer

• Keratoacanthoma
  – A low-grade squamous cell cancer
  – Usually appears suddenly
  – Not painful despite its appearance
  – Usually occurs in older folks in sun-exposed areas

• Deep margin a concern?

• “D&C’ed x2”
  – Desiccation and currettage
  – “Fry and scrape”
  – The electrical current destroys the tissue
    • Nothing to examine pathologically
  – Acceptable treatment for basal cell cancers and keratoacanthoma
  – NOT for pigmented lesions of any kind
Skin Cancer

• This lesion was treated appropriately and does not reflect an increased mortality risk

• Lesson
  – Understand the acceptable forms of treatment for various cancers
    • This one was kind of tricky
Path Report – Bottom Line

• Path reports are important because they:
  – Give us a “firm” diagnosis (or as close as we are likely to get)
  – Establish, or help to establish the stage and grade of cancer, thus determining insurability.

• Path reports can lead to underwriting errors when they:
  – Are misinterpreted
  – Are incomplete or only part of the picture
  – Are wrong (countermanded by a second opinion)
  – Staging/Grading system is incompletely understood or misapplied, or have changed

• If you have a question ask your supervisor or medical consultant (or both)
Path Reports - Questions