**SIGNS & SYMPTOMS**

### Diminished appetite/Weight loss

### SOB/Cough w/blood

### New wheezing + hoarse voice

### Nausea, vomiting, fatigue\*

### Headaches &confusion\*

### Suspicious changes in lymph nodes

### Frequent respiratory tract infections (bronchitis or pneumonia)

### Pain seems out of proportion to injury

### Severe pain at night (in hip)

### “Sign of the Buttock”

### Sharp P! w/WB, Dull Ache w/rest

### \* Due to Bone Breakdown elevated levels of calcium (hypercalcemia) are found causing sx/sy

**BACKGROUND & DESCRIPTION**

* Lung adenocarcinoma is a subtype of **Non-small cell lung cancer (NSCLC)**
* **Adenocarcinoma** is formed in mucus secreting glands throughout the body and is most prevalent in Lung Cancer
* Usually occur in **the periphery** and may be found in **scars** or areas of **chronic inflammation**
* Staging depends on **Tumor, Node** and **Metastasis,** and are designated as either ***Stage I, II, III or IV****(A or B)*
* **Stage IVB =** cancer has metastasized to distant parts of the body outside chest area (ex. Adrenal glands and bones)
* **Metastasis** from lungs to bone occurs via cancer cells spreading through the blood stream or lymphatics

**INCIDENCE & PREVALENCE**

* **40%** of lung cancer is due to adenocarcinoma
* **2/3** lung cancer diagnoses occur in people over the *age of 65*
* Mean average diagnosis is **71 yo**
* **Overall 5 year survival** rate is less than ***12-15%***
* Study by Sugiura et. Al 🡪 mean survival was ***9.7months***

### The Femur has been reported the *most common* extra-vertebral site for metastasis in pts w/lung cancer – 12% incidence rate

**RISK FACTORS**

Hx of smoking, family/personal hx of cancer, mutations of P53 gene, pulmonary conditions, exposure to asbestos/pollutants/radon,

**CLINICAL TESTS & SCREENING**

Palpation to Hip + surrounding structures

AROM/PROM/MMT to rule in/out MSK condition

Sign of the Buttock

X-ray, MRI, CT, Biopsy, Blood Testing

**PT ROLE & TREATMENT**

### Evaluate: Rule out potential MSK conditions such as Hip OA, fracture and Greater Trochanteric Bursitis

### Educate: Pt on concerning sx/sy

**Refer**: Lung cancer often goes unrecognized until more severe stages becoming a medical emergency



IMMEDIATE REFERRAL

Adenocarcinoma with any sign of metastasis indicates late stage of cancer

Lymph node changes

Unexplained breathing

Worsening of condition disproportionate to activity level

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