Genital Anomalies

- Bicornuate uterus
- Vesicovaginal fistula
- Ectopic ureter
- Urethral atresia
- Urinary tract anomalies
- Abnormalities of bladder
- Abnormalities of urethra
- Abnormalities of ureters
- Abnormalities of kidneys
- Vaginal anomalies
- Anomalies of external genitalia
- Anomalies of internal genitalia
- Anomalies of reproductive tract
PULM EDema

Hemodyn

Hypovolemic

Indirect

Microvss

Lymph

Obstruct

Pulm Overst

Palpable

Onset

RADIA

Sweating

Lipo

Dressings

Serum

Hyperkalemia

NEUROgenic

CNS

Stunning

Indirect

ALV Walling

Direct

Microvasc

Urticaria

NOS

High

Lung

Wean

Dep

HISTOCAP

Encoged

Ac

Saphe

cyanotic

Pink

Panco

Chronic

Rash

Firm

Induration

Histoid

Cap

Dependent

Lung

Accum

Cyanosis

Pulmonal

Pink

Panco
ALI & ARDS (DAD)

- Insured early P ALI & ARDS
- GFE
- Neonatal RDS NRDS
- Alveolar epithelium
- Hyaline membranes
- Alveolar fluid
- Fibrin
- Intravascular
- Sloughing
- Necrosis
- Procalcitonin
- C-reactive protein
- Neutrophils
- Infiltrated
- Alveolar walls
- NSCLM (normal saline lung collapse mechanism)
- Injury
- Alveolar damage
- Death
- Why?
- NRDS vs. ARDS
- Mortality
- Non-cardiogenic
- Infectious
- Adult ARDS
- Mostly fibrin
- Look the same!
ACUTE INTERSTITIAL PNEUMONIA

ARDS + NO KNOWN ETIOLOGY

ARDS ← SOMETHING ELSE

WHEN IT ISN'T = ARDS

HISTO = THEY CANNOT BE DIFFERENTIATED.
"Functional Classification"

Majority of Pulmo with the Not IFC

Obstructive vs Restrictive

Chronic IFE Disease

Asthma

Maximal Airflow Rate

FEV₁/FVC ≤ 0.7

V̇₁C + V̇FEV₁

FEV₁/FVC = N
"Functional" Classification

Majority of Pulms with Non-lFC Presentations

Obstructive & Restrictive

- Chronic
- Int. & Inflammatory
- Geriatric
- Lung Pathology
- VTLC

- Obstructive & Restrictive
- NMD
- Pulmonary
- Obesity

- Maximal MAP
- RV
- FEV1/FVC
- FVC
- FEV1/FVC
- FVC
- RV

FEV1 < 0.7

RV + VEFR

Any level

Tamu > ALV

Any level
- Luft: HyponoCOMPARTMENT
- Air or by?
- Large or small?
- Inspiration or Expiration?
- Hypercapnia?
- SMALL AIRWAY EXPANSION
  - Brain: E. weaving
  - HYPEREXPANION on CXR
  - Prolonged EXPIRATORY PHASE

- Opaque HYPO
  - "Compliance"
  - "Infiltrative"
  - ↑ LVL, DYSPE, Cyanosis
  - ↑ GAS TRANSFER
  - "Ground glass" on CXR
  -Opacity + Density

- Compliance lets SPO2 GVEES!
Smoking or Air Pollut + Graft Uvulopalatopharyngoplasty

Oxidative stress, Tumor necrosis factor alpha, Accumulation

Guanylyl cyclase II, NOS

Passage, Antioxidant imbalance

ALVI Wall; Oxidative
CB
- Pulmonary Cigarettes
- Chronic Guay
- Can occur = chronic
- Diffuse interstitial infiltrate
- i.e., Goblet Cells

- Mucus x Sec. Early
- CB mlll
- Hyaline Infiltrate
CLI

Status Asthmaticus

Day

SM

Stem: SM & Lungs

Upper Airway

Bronchial SM & Wall Changes

Cough

Severe

Chary

Troubles

Wheezing

Dyspnea

Cough

Over T

Hypertensive

Obstructive

ExHALAT

PEVA

Persistent

Narrow Obstruct

& Prolong gas

ExHALAT

PEVA
BRONCHI-ECTASIS

- LARGE GROWTH
- LIVER
- LEPROSY NEC
- INFHY

B

- GUIN
- TB
- MNT L

IFC

RA
- SLE
- MCTD

SYPH W/ IMMUN

B

OBSTMNC

LARGE AIR

SMALL
IPF - Invasive Pulmonary Fibrosis

Biopathic Not due to any viral cause like MPPV, SARS-CoV-2

CRPD - Unlike COPD, scar no remodeling
Could this have been proceeds by an unknown IEC P? Yet
PNEUMOCONIOSES

"OCCUPATIONAL"

Coal mines work

DUST

Chronic obstructive pneumonitis

Coal (miners' lung)

Silica

Asbestos

Nodules

Hay fever

Beef比索

Cumo

"Not very"
Sarcoidosis

- Manly under BUT (CNS) anywhere
- F → IM
- M → Govt
- Young adults, black, O/C

M → SWhy

- Chest rule
- Typically nodular
- Usually, but hard to find
Sarcoidosis

- Eye
- Skin
- Lungs
- Lymph nodes
- GI tract
- Various sites

- Gravulomas
- Caspase
- Various sites

- Immun...
VASC - PULM - D

PE

PH → CO2 PANTONALE

TB, IC, RVLD, D & P/U

Hemodyalisis → GPD

Hemor. SDS

Goodmark

8. Same renal PBS & E GPD

Support for?
PULMONARY INFECTIONS

- Organisms
  - Known
  - Unknown

- Pathways
  - Inhalation
  - Nasal
  - Conjunctival

- Symptoms
  - Chronic
  - Acute
  - Complications

- Complications
  - Lung injury
  - Chronic
  - Acute

- CA
  - CA
  - HCA

- Other factors
  - NAD
  - TLR
  - NF-kB

- Genetic factors
  - Genetic
  - Inflammatory

- Therapeutics
  - Antibiotics
  - Corticosteroids

- Other factors
  - Tobacco use
  - Environmental exposure

- Diagnostic tests
  - X-ray
  - CT scan

- Other considerations
  - Host response
  - Immune response

- Prevention strategies
  - Vaccination
  - Hygiene

- Case studies
  - Case study 1
    - Patient A
    - Patient B

- Pathophysiology
  - Alveolar macrophages
  - Inflammation

- Clinical presentation
  - Fever
  - Cough
  - Shortness of breath

- Prognosis
  - Favorable
  - Unfavorable
Comparison
Bronchop
Lobar P
CAVP

ISC VACC INJURY

IMMUNIZATION

CEN

ANC

Influenza

A, B, C

Important

SMALL INFANTS

PNEUMONIA

1918-PAN D INFECTION

SMALL COLD

PAN D INFECTION

SMALL COLD

PAN D INFECTION

SMALL COLD

PAN D INFECTION

SMALL COLD

PAN D INFECTION

SMALL COLD

PAN D INFECTION

SMALL COLD

PAN D INFECTION

SMALL COLD

PAN D INFECTION

SMALL COLD

PAN D INFECTION

SMALL COLD

PAN D INFECTION

SMALL COLD

PAN D INFECTION

SMALL COLD

PAN D INFECTION

SMALL COLD

PAN D INFECTION

SMALL COLD

PAN D INFECTION

SMALL COLD

PAN D INFECTION

SMALL COLD

PAN D INFECTION

SMALL COLD

PAN D INFECTION

SMALL COLD
SRAS

Fever

Influenza

General

Not H1N1

Not SARS

ACR

1918 H1N1

Pan-Asian Flu

Viruses

Mortality

1957 Hong Kong Flu

1968 Asian Flu

1977 Indonesia Flu

1982 Mexico City Flu

1997 Hong Kong Flu

2002 SARS

Coronavirus

Contagious by PCR

Spreads across Asia

Generally

Not H1N1

Fever

Influenza

Elderly

Children

Mortality

H1N1

Many strains

Animal strains

SGY DAM ACOADATU

MUGUL E WAY

FOR B P++

STAPH
HCAP

Patient

HCAP > CAP
Gram positivity

Clinical

Pneumonia
Acute respiratory illness

Antibiotics
IV Antimicrobial
Chemotherapy

Wound care

Pneumonia in residence
LT Care Facility
Antimicrobial

H N

Present for > 2 days

Gram negative organisms
R S. aureus
HAP

- Acquired during stay
- Immunocompromised
- Pseudomonas
- Staphylococcus
- Coagulase negative
- MRSA
- Staph aureus
- Enterococcus
- Viridans strep

- Infection
- Fever
- Sepsis
- Organ failure
- Ventilator
- IV catheter
- Central line

- High risk
- Bugs - V. Macrobius
- Sick people
ASPIRATION PNEUMONIA

- Severe
- Prolonged cough
- Difficulty swallowing or oral intake
- Loss of consciousness
- Contents in lungs
- Partly chemical pneumonia

- Pneumonia
- Lung abscess
- Inhalation pneumonia

- GERD
- Esophagus
- Peptic ulcer disease
- Gastric contents

- Nausea
- Vomiting
- Seizures

- Supportive care
- Local care
- IV fluids
- Oxygen

- Spinal cord injury
- Brain injury
- Paralysis

- Start ventilation
- Support
- Pain management
- IV fluids
- Zantac

- Fever
- Chills
- Cough
Histoplasmosis

- Pulmonary
- Disseminated
- Histoplasma capsulatum

- Can infect everyone
- Can cause cocc
decay

- Low wind cut
- High wind cut

- Can cause cavities
- Can cause malaria

- Ruptured bone
- Cutaneous
- Lung

- Spores bind on bat droppings
- Histoplasma capsulatum

- Healthy
- Off the
- Calcified
MANALOA RANCH

COME & GO WITH
GUNS & TOOLS

RHOS

Fungi
SARGIS
PB

PLAY WITH
ALMOST ANYTHING
PULMONARY DISEASE IN HIV

- Tuberculosis (TBC)
- Pneumocystis jirovecii (PCP)
- Candida albicans
- Histoplasma capsulatum
- Cryptococcus neoformans
- Toxoplasma gondii
- Mycobacteria
- Fungi

Also:
- Lung cancer
- Lymphoma
- Malignancies

HIV@vs

HIV @ce

"cotton wool" or "woolly" edemas
Both radiol & histol
LUNG TUMORS

2 TYPES

LARGE AD

SCC

NSCC

BENIGN

MALIGNANT

BASED ON CART

BUT SO PC DON'T

SOMATOTROPIN

REV

PTX

CPT

ML

REV

DNA

MCM

KNAS

EGFR

HER-2

MET

NEU

MBC

RAS

SURVIVAL

POULTRY AROMATIC

RADON

RADON

HC

ANOMALOUS

DEVELOPMENT

LUNG

BUT REPOSE:

MORE CARCINOGENIC

METABOLISM

150-65 Y

SOUTH

RACIOUS

SOLID

SUPER

C57

INHIBIT CANCER

SQUAMAT CANCER

SQUAMAT CANCER

Squamous Cell

Squamous Cell

ETC

+ FULL BLAZING

SQUAMOUS CAN

= TUMOR

GENOMY

AT = STOP

Cancer!
Carcinomas

80-85% Lung Tum
Most freq. MEN, CMM, GU, BR
EX CLINICAL SKIN

MC
Cancer+

CGN & FVET

M.C.
MC Swind

EGFR
ALK
FOS & MET

All by biopsy
Best if small & slow

Malignant tumors also available
Along with the KIN +oss
For treat with
CLIN

PROMISE

SDS

PFS - 100%

NS%

SYSTEMIC EFFECTS OF LUNG CANCER

SURVIVAL

OYMPAL SY 16%

50% OS 3 YR

27.9% Regional Met.

4.6% Distal Met.

TARGETED THERAPY

PRENADOC & EGFR WTs (15% patience)

PIOMA SURVIVAL
<table>
<thead>
<tr>
<th></th>
<th>SMALL CELL CARCINOMA (SCLC)</th>
<th>NON-SMALL CELL CARCINOMA (NSCLC)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Histology</strong></td>
<td>Scant mitotic activity, small uniform nuclei + true paranuclear N ficin + flimsy, non-tethering, dispersed sheets of tumor cells</td>
<td>Arising from bronchial mucosa + common intrapulmonary origin</td>
</tr>
<tr>
<td><strong>Electrocyte markers</strong></td>
<td>Usually present</td>
<td>- Asbestos</td>
</tr>
<tr>
<td><strong>RET markers</strong></td>
<td>Present</td>
<td>Present</td>
</tr>
<tr>
<td><strong>HCG</strong></td>
<td>Present</td>
<td>+ in adenocarcinoma</td>
</tr>
<tr>
<td><strong>PAP/ACTH/ADH/GHRP/cGMP</strong></td>
<td>ACTH, ADH, GHRP, cGMP</td>
<td>Other in squamous cell</td>
</tr>
<tr>
<td>Clinical Feature</td>
<td>Patho Basis</td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------------</td>
<td></td>
</tr>
<tr>
<td>Cough (50-75%)</td>
<td>INJ CT AIRWAYS</td>
<td></td>
</tr>
<tr>
<td>Hemoptysis (25-50)</td>
<td>HEMORRHAGE FROM TUM IN AIRWAY</td>
<td></td>
</tr>
<tr>
<td>Chest Pain (20)</td>
<td>TUM SPREAD INTO MEDIA, PUERNA &amp; CHEST WALL</td>
<td></td>
</tr>
<tr>
<td>Pneumonia, Abscesses, Local Collapse</td>
<td>TUM OBSTRUCT; ACCUMULATION OF FLUID IN EARLY MAC</td>
<td></td>
</tr>
<tr>
<td>LUNG PLEURISATION</td>
<td>TUM SPREAD INTO PUERNA</td>
<td></td>
</tr>
<tr>
<td>Pleural Expansion</td>
<td>TUM SPREAD INTO PUERNA</td>
<td></td>
</tr>
<tr>
<td>Hoarseness</td>
<td>REC LAT N INVASION</td>
<td></td>
</tr>
<tr>
<td>Dysphagia</td>
<td>ESOPH INVASION</td>
<td></td>
</tr>
<tr>
<td>Dimpl Pneumatisis</td>
<td>PHRENIC N INVASION</td>
<td></td>
</tr>
<tr>
<td>Rib Destruction</td>
<td>CHEST WALL INVASION</td>
<td></td>
</tr>
<tr>
<td>SVC SD</td>
<td>SVC COMPRESSION BY TUMOR</td>
<td></td>
</tr>
<tr>
<td>Horner SD</td>
<td>SYMP G INVASION</td>
<td></td>
</tr>
<tr>
<td>Pauwelsiu, Ramonade</td>
<td>PSMC INVOLV.</td>
<td></td>
</tr>
</tbody>
</table>
CAS

Cornification, Hyperkeratosis

- More often pertinent
- Tends to weigh more

Some other recognizable lesions

SCC

Small, thin lesions
ATYPICAL ADENOMATOUS HYPERPLASIA

LED: small 5mm

INvasive Dysplastic

LINing MYOllS

Inflamed

Fibrotic

SWAB

or multiple

in addition to

invasive tum

away from it
Mediastinal Tumors & Other Masses

ANTERIOR
- THYROID
- PARATHYROID TUMORS
- MALIGNANT CA

MIDDLE
- LYMPHOMA
- PERICARDIAL Cyst
- MEDIASTINAL Cyst

POSTERIOR
- NEUROGENIC TUMORS
- LIPOMA
- LYMPHOMA
- (MOST ARE FROM THE LUNG)
NB: OF RV VERY AS DISTANT MET FOR LUNG CA = MALIGNANT!

- Portal Cholangiocarcinoma: Lung: Sarcoma
  - UNUSUAL

- MET TUM
  - SITE SOMETIMES FOR METASTATIC SARCOMAS
  - SITE IS NOT USEFUL FOR DISTANT METASTASIS
  - MAY NOT REASONABLE

- CAVOCULAR
  - DIRECT EXTENSION
  - FOR GLO Boss (ganglion)
    - Via LL
    - HUMID
  - USUAL CAES
    - MULTIPLE
  - CANNONBALL LOANS

- SEEDS
  - OCCASIONAL
  - WITH MALIGNANT
  - AND MALIGNANT

- OCCASIONAL
  - WITH MALIGNANT
  - AND MALIGNANT

- USUAL CAESE
  - MULTIPLE
  - CANNONBALL LOANS
  - SCABINOSITY THROUGHOUT
  - LOBES
  - NODES BEING AT P

- UNUSUAL
- MULTIPLE
pleura

tissue

meioplasms

air

tissue

inflammation

underlying change

PV

PP

parietal

visceral

air

primary

mylo

heart

lung

BRN

CVA

CVA

BRN
Pleural Tumors

- Solitary Fibrous
- Mesothelioma
  - "Ben" vs "Mal"
  - "DIE" do not apply
  - BUT SELF-LIMITED
  - LOCALIZED
  - NODULE
  - CAN BE RESPONSIVE AS BEV

- Malignant
  - "Mets"

- Epidermoid
  - Will quit not
  - Caveat

- Cytology
  - Glad
  - Look

- Elevation of CA 125
  - Malignant
  - Look
  - Elevation
  - Caveat

- 1111
  - See
  - Here

- Mesothelioma ≠ CA
  - Cavities

- Unique
  - Cavitary

- Many moreBIG
  - Micronini

- Non-Robot

- Imaging Lung
  - From outside

- Pulm On Sur

- Mesothelioma
  - "Ben" vs "Mal"
  - "DIE" do not apply
  - BUT SELF-LIMITED
  - LOCALIZED
  - NODULE
  - CAN BE RESPONSIVE AS BEV

- Spacing → HAL