HYPERREACTIVITY
BLOOD VESSELS

ARTERIOSCLEROSIS

TUMORS
ANOMALIES
WALL RESPONSE TO INJURY
HY-PRESSURE
SP REGULATION
PG
VAX PATHO

VASCULITIS
ANEURYSMS
DISSECTION

OTHER
THROMBOEMBOLIC OBSTRUCTIONS
THROMBOSIS OBSTRUCTIVE
MICROVASCULAR
VASCULAR DISEASE

ANASTOMOSIS
POLYARTERITIS NODOSA
THROMBOTIC (INTRA)
THROMBOTIC (EXTRA)
THROMBOTIC (VASCULAR)
THROMBOTIC (ARTIFICAL)
Tumors

Benign

- Lymphomas
  - Classic
  - Intermediate
  - High

- Hemangioma
  - Protruding

- Angiomas (Malignant)

- Kaposi
  - SPGMA

- EPD

- Transplant

- Erythroleukaemia

- Classic

- Intermediate

- Localized

- Aggressive

- Prognosis

- Eosinophilic

- Granulomas

- Juvenile

- Capillary

- Composed EC

Malignant

- PROVING VESSELS

- Grade

- Poor

- High

- Low

- Normal

- Obvious

- Arising

- Angiomas

- Lymphomas

- Hemangioendotheliosis

- Intermittent

- Hemangioma

- Tumour-like

- Vacuolar

- Flamingo

- Soft tissue

- Papillary

- TEVAN

- Neoplasms

- HER

- Lipomas

- Senile

- Angiomas

- Juvenile

- Capillary

- Composed EC

- De novo
VASCULAR INTERVENTION
ENDOVASC INTervention
Diagram of cellular and extracellular matrix interactions.
Jekyll/Hyde concept: maintain hemostasis / cause thrombosis

EC

ELASTIN

Fibrin

PLT

P-selectin

TF

Pai-1

ECM
BP = CO x PR

CO PR in turn influenced by genetic & environmental factors

BP regulation

Kioncys (?)

All Hypertension

load

HR

Genetic

CO2

PR

Genetic
ARterioSclerosis

Arteriosclerosis

Root cause: Hyperlipidemia

- Total cholesterol
- LDL cholesterol
- Triglycerides
- HDL cholesterol

- Diabetes
- Hypertension
- Smoking
- Age

Pathophysiology:
- Vascular wall thickening
- Intimal thickening
- Medial thickening
- Fibrous tissue

Clinical Manifestations:
- Angina
- MI
- Stroke
- Peripheral vascular disease

Risk Factors:
- Hyperlipidemia
- Hypertension
- Diabetes
- Smoking
- Age

Diagnosis:
- Blood tests
- Imaging studies

Treatment:
- Lifestyle modifications
- Medications
- Surgery

Complications:
- Cardiovascular disease
- Nerve damage
- Renal failure

Prevention:
- Healthy diet
- Regular exercise
- Quit smoking
- Manage blood pressure
LIFE LONG EVEN CHILDHOOD PROCESS.

NOM or MINIMAL: Sequences in Pools

Main Events:
- Focal/tissue
- Papillary

Middle Stage:
- Isolated macrofoams

Intermediate Stage:
- Changes, small pools
- Atelectasis, changes, gas

Fibroplastic:
- Core & ES lesion
- ES lesion & ES lesion

Transformation:
- Thrombus

6 Ways to Define the Same Process!
Prevention Principles

- Diet
- Ethnic
- Sex
- RF IN
- Childhood
- Adult

Can be reversed?
No
But slowed down
PAN

Classical ANCA

17F deposits

ANCA

Nephropathy

Granular

Chronic hepatitis

Not involved

Unknown

Open visceral AA

Other

HOT

GUM

GV graft vs. in.

PD

Nephritis

1/3 cases

Classic idiopathic

Unknown

Interacts with ANCA

Ischemia

Graft vs. host injury
KAWASAKI D

- MORTALITY ~ PAN
- ANGLE & SPONGE
- THS
- TOYOTA UNICORN
- ANNEC ABS

- PATIENTS: ADULTS & CHILDREN
- IN INFECTION
- CLINICAL
- MONONUCLEAR LN SD
- "STRAWBERRY"

- CARDIAC
- ARRAHYTHMIA
- 20% WITH PATIENTS
- LEFT ATRIAL FIBRILLATION

- CONJUNCTIVITIS
- KOPLOW
- DIARRHEA
- GASTRITIS

- CROWN ENTRAPMENT
- SUNSET LEGS
Morbo Kawasaki D

- Typically subacute onset
- Fever, malaise, arthralgia
- Rash: erythematous, non-pruritic
- Oral ulcers
- Conjunctivitis
- Arthritis
- Erythema nodosum
- Splenomegaly
- Cardiac involvement: pericarditis, myocarditis

- Nodular lesions:
  - Hypertrophic osteoarthropathy
  - Aneurysms

- Laboratory findings:
  - Hyperferritinemia
  - Elevated inflammatory markers
  - ANA, RF, CRP

- Prognosis:
  - Generally self-limited
  - Rarely fatal

- Treatment:
  - Symptomatic management
  - Corticosteroids
  - Immunosuppressants
Microscopic Polyangiitis

HS leukocytoclastic
Koilura-host
LCV

Some cases Ab 12 to 12
Typically lupus anticoagulant
"PANC"-like

Typically lymphangiitis
carditis auto-HLA

Dermatologi: Itch, Swelling
Bone:

No Ig or UPE
Pt. Raynaud
Bulky cap is
Neutrophilic
30%

Typical
Neutrophils

Lung: Pneumonic
Fasciia

Walls

NODS
CHURG-Strauss SD

50-60% patients

Diagnosis

- EDS
- ANCA
- VES
- NPN

Causally linked to INF gamma R in Carbohydrate that die in 60% of patients

20% have ANCA

- Smaller vessel
- ANCA
- Granulomas
- GSP

Post-therapy Eosinophilia

- Granulomas

ALL CLASSICAL CYTOKINES MIGHT ACTIVATE DENDRITIC CELLS.

May have an element of valium.

OTHER IRF

3 TARGETS FOR

GBM

SYNOVA

Be subsets

Identifying

Unknown pathway

was not

important

Immunosup

vs

Antigen
THROMBOEMBOLIS AND PULSATING THROMBUS

Thromboembolism
- Various sites
  - Saphenous T
  - Leg
  - Deep
- Deep leg veins
- Pulmonary site
- Proximal
- Resting state

Pulsating Thrombus
- Thrombus T
- Pulmonary
- SD
- EDMA
- LAMINO

Although 30%
- DVT
- Cause for DVT
- Causes
- Resting state
- Proximal
- Deep leg veins
- Pulmonary

Other common sites
- Popliteal, femoral, iliac
- Resting state

Pulsating Thrombus
- Usually QD
- Most common
- Proximal
- EDMA

P Shall
- DVT = C of
- Pulmonary
- Popliteal, femoral, iliac

PULSATING THROMBUS
Almost all nevi turn brown and spiny, if not — specifically for ER
LIKE VIII
GLOOMY

GLOMUS TUMOR

VENAL

CUTANEOUS

BEL

FALLOUT

MASS

NESTS

AGGREGATION

CONSIST

BLOODPOINT MAY BE

VENAL

DYSERYTHROPE

MC

DISPAR

UNION

NAIL BEDS

PAINFUL
Hemangioblastoma

Epithelioid hemangioblastoma


case of CD31

May die

Often, 20% & 40%

Although

May recur

Used by excision

Most