Takayasu Aortitis Arteritis in Children and Adults

DENNIS FOLEY
MEDICAL COLLEGE
WISCONSIN
Disclosure

- GENERAL ELECTRIC HEALTHCARE
- CONSULTANT
Takayasu Aortitis Arteritis

**PATHOLOGY**
- LARGE VESSEL VASCULITIS
- GRANULOMAS ADJACENT TO THE VASA VASORUM
- PROGRESSION TO STENOSIS, DISSECTION AND ANEURYSM
NATURAL HISTORY

- 20% - MONOPHASIC SELF LIMITING
- 80% - RELAPSES
  - IMMUNOSUPPRESSION RESULTS IN REMISSION IN 60%
- SURVIVAL – 90% AFTER 10 YEARS REDUCED TO 36% IN PATIENTS WITH TWO OR MORE COMPLICATIONS
Takayasu Aortitis Arteritis

**DIAGNOSTIC FEATURES**

- **CLINICAL**
  - FEVER, ARTHRHALAGIA
  - SYMPTOMS RELATED TO ISCHEMIA OR ANEURYSM

- **LABORATORY**
  - ELEVATED ESR, C REACTIVE PROTEIN, GAMMA GLOBULIN

- **IMAGING FINDINGS**
Classification

1. AORTIC ARCH AND BRANCHES
2A. ASC AORTA, ARCH AND BRANCHES
2B. 2A PLUS DESCENDING AORTA
3. DESC THORAIC AND ABD AORTA AND BRANCHES
4. ABDOMINAL AORTA AND BRANCHES
5. THORACOABDOMINAL AORTA AND BRANCHES
Takayasu Aortitis Arteritis

**MANAGEMENT**

- **FIRST EPISODE**
  - CORTICO STEROIDS

- **REPEAT EPISODE**
  - CORTICO STEROIDS
  - IMMUNOSUPPRESSION
TAKAYASU AORTITIS
CATEGORY 2
DESC THORACIC AORTITIS
TAKAYASU ARTERITIS
CATEGORY 1
RT / LT CAROTID STENOSES
RT SUBCLAVIAN AN VERTEBRAL STENOSES
LT SUBCLAVIAN AN OCCLUSION
LT VERTEBRAL STENOSIS
TAKYASU ARTERITIS

RVA  RCA  LCA  LVA
RT / LT CAROTID STENOSES
RT VERTEBRAL OCCLUSION
LT VERTEBRAL STENOSIS
CATEGORY 1

LT CAROTID OCCLUSION

LT SUBCLAVIAN OCCLUSION
CATEGORY 1

BIL CAROTID STENOSES

RT SUBCLAVIAN, RT VERTEBRAL STENOSIS

NORMAL CALIBER LT SUBCLAVIAN

HYPERTROPHIED LT VERTEBRAL
CATEGORY 2A/ 3
AS AORTA, ARCH, SUPRA RENAL AORTA
SUB RENALATHEROMA
Pediatric Takayasu Arteritis

- 8 YEAR OLD MALE
- FEVER MALAISE
- ELEVATED ESR
- DIMINISHED LEFT FEMORAL PULSE
Hemorrhagic Takayasu Aortitis
HEMORRHAGIC TAKAYASU AORTITIS
Takayasu Aortitis Arteritis

DIFFERENTIAL DIAGNOSIS

- AORTIC COARCTATION
- ATHEROSCLEROSIS
- BEHCET’S DISEASE
- BUERGER’S DISEASE
- GIANT CELL ARTERITIS
- KAWASAKI DISEASE
Takayasu Aortitis/ Arteritis

- DIVERSE SPECTRUM OF ANGIOGRAPHIC FINDINGS
- MONOPHASIC OR RELAPSING
- DIAGNOSIS RELATED TO CLINICAL, LABORATORY AND IMAGING FINDINGS