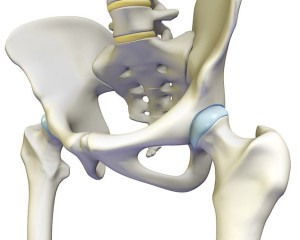
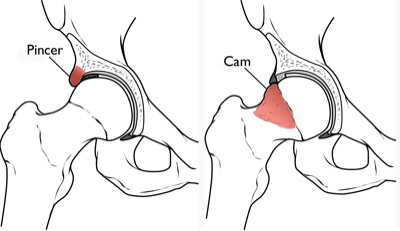
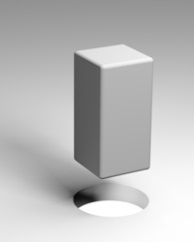
**FAI: Femoroacetabular Impingement and Hip Arthroscopy**

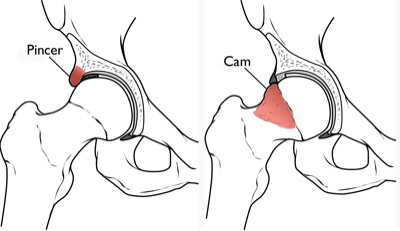
Understanding Your Options

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**What is it?**

* The normal hip is a highly congruent **ball and socket** joint
* FAI occurs when there is a structural **mismatch** between the ball (femur) and the socket (acetabulum)
* **Abnormal contact (impingement)** at extremes of hip range of motion leads to **dysfunction** and **damage**
* **Small deformity** may become symptomatic with high-level activities while **symptoms with routine activities** may occur with **larger deformities** or **more advanced damage**
* damage usually the result of **cumulative effects** of **repetitive abnormal contact**

**Types of FAI**

* **Cam Impingement**
  + The ball (femoral head) is **not** completely round
  + May be a **prominent bump** or the ball may be **elliptical** in shape
  + Damage occurs when the **out-of-round** area of the ball rotates into the round socket (*square peg in a round hole*)
  + Pain occurs with hip flexion, inward rotation, squats, etc.
  + More common in **men**
* **Pincer Impingement**
  + **Overhanging rim** of socket *decreases clearance* during hip motion
  + May be caused by a socket that is **too deep** or **not facing forward** (retroversion)
  + Damage occurs when the **neck collides** with the rim of socket
  + Pain with hip flexion, stairs, abduction, etc.
  + More common in **women**
* **Mixed or Combined**: elements of both cam and pincer FAI

**Management**

* **Key concepts to consider**:
  + FAI is a **dynamic** problem…. it occurs because the **hip is under stress** from the activities to which it is exposed
  + A high percentage of people have hips that would meet X-ray criteria for FAI, but **only a small percentage become symptomatic**, and an **even smaller percentage require intervention**
  + High percentage of people with FAI have similar findings **on the other hip** but do not have symptoms
* Goal of management is returning the hip to the **pre-symptomatic state** by **reducing inflammation** and **optimizing the mechanics** around the pelvis
* **Rest** and **avoiding the inciting activity** will improve symptoms and allow healing
* **Anti-inflammatory medicines** (ibuprofen, naproxen, etc.) decrease swelling and inflammation
* A **cortisone injection** may help to calm inflammation in the joint
* **Physical therapy** is essential to **improving pelvic mechanics** and **stabilizing gait**
* ***Most cases of FAI improve without surgery***

**Arthroscopic Surgery for FAI**

* Goal is to **correct** the **bony abnormality** underlying the impingement
* small (4 mm) **video camera** inserted into the hip joint and **highly specialized instruments** are used to perform surgery
* **Traction** is required to separate ball from socket
* **Cam FAI** – the **ball** is **is made more spherical** to **improve congruity**
* **Pincer FAI** – the **rim** is **trimmed** to **increase clearance**
* Secondary damage (labral tears, cartilage damage) fixed or cleaned up
* Recovery takes **4 to 6 months** and requires rigorous therapy to restore hip function
* **Potential complications** include traction-related injury, nerve damage, progression of labral tearing and/or arthritis, abnormal bone formation in muscles around the hip, blood clots, incomplete correction, and residual pain

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| **Cam correction**    C:\Users\fwg7d\Dropbox\HIP\Hip figures\Byrd D&D Figures\CH0084_FigByrd 32D_Byrd_v1_Orig.tif ⋆  **C:\Users\fwg7d\Dropbox\HIP\Hip figures\Byrd D&D Figures\CH0084_FigByrd 32A_Byrd_v1_Orig.tif** | C:\Users\fwg7d\Dropbox\HIP\Hip figures\Byrd D&D Figures\CH0084_FigByrd 28D_Byrd_v1_Orig.tifC:\Users\fwg7d\Dropbox\HIP\Hip figures\Byrd D&D Figures\CH0084_FigByrd 28B_Byrd_v1_Orig.tif**Pincer correction**  ⋆ |