Anterior Knee Pain (AKP) Handout

WHAT IS IT?
AKP is pain in the front half of the knee and has many other names including runner’s knee, chondromalacia and patellofemoral pain.

WHAT ARE THE SYMPTOMS?
AKP results in pain in the area of the kneecap when you do things like run, go up or down stairs, kneel or sit with your knee bent, & squatting. Sometimes there are grinding or popping noises. You may also feel like your knee is going to give out.

WHY DOES IT HURT?
We believe the problem is that the kneecap and the tissues around it are not gliding correctly in the groove at the end of the thighbone. This puts extra pressure on some parts of the knee and may pinch or stretch other parts.

WHY DO I HAVE IT?
You may be vulnerable to developing AKP because of the way your body is built, such as being knock-kneed or having flat feet. The ultimate cause is that the muscles that control the knee have lost the normal smooth way they are supposed to work together. Frequently the problem may be more related to things away from your knee such as the muscles in your hips. This can happen for many reasons including as a result of an injury, overuse or loss of conditioning.

Once it begins to hurt, people often end up in a vicious cycle of PAIN --- WEAKNESS --- PAIN

WHAT DO I DO TO GET BETTER?
Work on getting your muscles to control the way your leg works better. This involves stretching and strengthening of the muscles of your hips and legs. We have some suggested exercises to get started but recommend you see a physical therapist to have a customized program made and adjusted for you.
This is usually not a problem that is solved quickly or permanently. It takes time to gain strength and coordination. It is common to get better and to then have a setback. If you have AKP you know you are vulnerable to getting it and you can get it again. Continuing to do the exercises will make you more durable, so you are less likely to get it again.

**SUGGESTIONS FOR SOME EXERCISES & STRETCHES TO START WITH:**

**HIP/KNEE – Strengthening: Straight Leg Raise**

Tighten muscles on front of right thigh, then lift leg to level of other leg, keeping knee locked. Every time you return to the table, you MUST relax your muscles.

Repeat 25 times per set. Do 2 sessions per day.

**LEG/KNEE – Stretching: Hamstring — Wall**

Back against wall, slide down so knees are at 90° angle.

Hold 30 seconds.

Complete 3–5 repetitions.

**LEGS: GLUTES/THIGHS – Wall Sit**

Back against wall, slide down so knees are at 90° angle.

Hold 30 seconds.

Complete 3–5 repetitions.

**LEGS: GLUTES/THIGHS – Leg Abduction: Single Leg (Ankle Weight)**

Top leg weighted and straight, sweep leg upward as far as possible. Complete all repetitions to one side. Repeat on other side.

Do 3 sets of 12.

**UPPER LEG: Quadriceps**

From starting position, raise leg until stretch is felt. Hold 15 seconds.

Repeat with other leg.

Repeat 3 times on each side.

**GROIN – Thigh Adductors**

Grasping feet with hands and bending from hips, gently pull forward until stretch is felt.

Hold 15 seconds.

Repeat 3 times per set.