What is Carpometacarpal Joint Arthritis

The CMC joint is the joint at the base of your thumb. It is made of two bones. These bones are your metacarpal and trapezium.

The cartilage on the metacarpal and the trapezium wears down because of the Osteoarthritis.
Cartilage allows the bones to move smoothly over each other when your CMC moves. When it wears down, it loses the smooth surface and the bones rub against each other and you feel pain with movement.

Causes of CMC joint Arthritis:

Osteoarthritis:
Overuse of the joint, hereditary (family history of arthritis)
1 lbs of pinch at the tip of index and thumb increases the load at the CMC joint by 6 lbs, thus if your job or hobbies included activities that involved pinching, you are at a greater risk of developing OA at the CMC joint.

Hypermobility at the CMC
The ligaments of the CMC joint are loose and unstable; because of this, the pressure falls unevenly with pinching / gripping activities resulting in early wear and tear of the cartilage in the area.

Degenerative conditions caused by a trauma.
This occurs most often with fractures. The bones and cartilage in the joint may be disrupted by the injury and begin to rub against each other and cause early wear and tear of the joint.

In general, when cartilage wears down, you have pain with simple gripping and pinching tasks due to damage to the cartilage, resulting in bone on bone.

To Schedule an Appointment call 1 408-268-8536
How do I prevent the arthritis from getting worse:

Depending on the stage of the disease, your doctor may recommend one of the following:

If you present to the physician at stage 1 or 2, he will refer you to a certified hand therapist to get a custom splint fabricated and learn the techniques to prevent progression of the disease.

A hand therapist will fabricate a custom splint for your, and educate you in its wear and care. Patients are usually seen for 1x wk for 4 week, to make any adjustments in the splint, and educate you in modifying your equipments or purchasing devices to make your life easier and preventing further progression of the disease by avoiding unnecessary pinching / gripping activities. If patient is experiencing excruciating pain your therapist may offer you Iontophoresis patch.

Adaptive devices usually recommended are

[Images of various adaptive devices]
**Therapy**

Patient is also taught how to manage symptoms and thus reduce discomfort.

After the 4 weeks your therapist will provide you with a soft CMC splint, thus you can now switch between the hard splint to the soft splints based on the activities.

**Corticisone Injections**

If your symptoms are severe and you are at stage 3 – early 4 your doctor may offer you a cortisone shot. A max of 3 shots / year are offered. The shots may decrease the pain but it does not eliminate your problem. Thus, you would need to continue with your joint management techniques with adaptive devices and continue your splint wear etc. The shots buy you time to prepare for surgery if the symptoms return or get worse.

**Surgery CMC arthroplasty**

Types of CMC arthroplasty
- LRTI: Ligament reconstruction tendon interposition
- Suture button suspensionplasty,
- CMC Arthroplasty with Cartilage Allograft
- If you have hyperextension at the MCP joint, your doctor may choose to do MCP Capsulodesis
- If you thumb presents with severe Adduction contracture, they may release that and correct it as well
- Etc

**LRTI** (the most common surgery) The trapezium, one of the small bones in the wrist, is removed. Then a wrist tendon (Palmaris longus or part of FCR) is cut and rolled into a ball. This ball is then used to fill the space where the trapezium was located. The surgeon then secures the tendon in...
place, occasionally a pin is used for this.

What are possible complications?
Complications are minimal, but they may include the following:

- Carpal tunnel syndrome due to swelling (often resolves)
- Hypersensitivity over the incision
- Infection
- Numbness and tingling

What should I expect after surgery?

Goals of Therapy:

1. Decrease swelling, pain, and scarring right after surgery.
2. Stabilize the thumb immediately after surgery.
3. Improve movement of the hand and thumb. (four to six weeks after surgery)
4. Strengthen the hand and thumb. (at 8 weeks)

Splint/Cast:

For the first 3-4 weeks after surgery you will be in a cast to protect the thumb.

Next you will be fit with a custom hand based thumb spica splint to wear for about four weeks. This splint will be worn at all times to provide support to the thumb and protect the surgery. As the surgery heals, the splint can be removed for exercises prescribed by your therapist or doctor.

Splints, are weaned off from 6 weeks to 3 months after surgery. Some people continue to wear the splint for heavy use of the hand.

Therapy:

Therapy is normally initiated about four weeks after surgery. Time frames may vary depending on your doctor and how fast you heal.
Scar Management:
Your thumb scar following surgery will look something like the picture above; you will also have a smaller scar on your forearm. You will be taught techniques to help to control the scarring from this surgery. Use Vitamin E to massage the scar once the incisions are healed.

Exercises:
Exercises will focus on regaining pain-free movement in your thumb and wrist joint and promoting improved fine motor coordination. You will begin with gentle active assistive motion. Resistive gripping and strengthening exercises are often not started until two months after surgery. Pinching is the last movement to be strengthened. This is because pinching places the greatest amount of force on the CMC joint, and you may damage the surgery if this is started too soon.

Edema Management:
Edema is swelling. Keep your hand elevated at all times until you are able to resume normal function with your hand. You will be taught specific massage techniques to manage any swelling in your thumb/hand. Keeping your hand elevated, icing regularly and performing your exercises will help reduce swelling.

Modalities:
Often a therapy session will be initiated with a modality. The therapist may use some form of heat, such as moist heat, ultrasound, or paraffin wax to decrease pain and stiffness in your joints. They may also offer Laser to enhance wound healing, decrease pain and swelling early in therapy.

What will the final result be?
The main goal of this surgery is to alleviate pain and achieve stability in your CMC joint. Many people want to rush the healing process. Just remember, is it more important to improve stability by delaying golf for a few weeks than to have the results of this surgery last 30 years? Full range of motion and a functional level of strength should also be achieved. A functional level of strength means you can complete most tasks (opening jars, turning keys, office work, etc.) without needing help from others. Range of motion and strength should also be pain free. The recovery from
this surgery can range from twelve to sixteen weeks.

**How should I prepare for surgery?**

Just prior to surgery, purchase items you will need from the grocery store that you will be able to prepare/open and use without too much difficulty. Consider prepared healthy meals and easy-to-prepare items for the first few weeks.

To simplify preparing your weekly medications consider a plastic dispenser with sufficient slots to accommodate a week of your medications. Available in all drugstores

At your pharmacy, for non child-proof lids on all your prescriptions until you have good use of your surgical hand. When picking up your prescriptions, be sure to check that the lids are not child proof before leaving the pharmacy.

**Be extremely cautious about keeping all your medications out of reach of any children in or visiting your household.**

In the bathroom:

- Temporary grab bar in shower would be beneficial for added stability, they attach with suction cups
- Electric blow dryer with flexible wall mounted stand assists with styling your hair
- Electric tooth brush helps tremendously, along with toothpaste with snap cap and Individual use dental floss.
- You may want to have clothes you can slip on, e.g.: bra you can slip into..one without any fasteners. A sports bra or other easy-to-slip on model will help you dress more comfortably after surgery. Pull up trousers, rather than one that requires fastening

More suggestions follow.....

Hand and Upper Extremity Specialist
Adaptive devices can make life of person battling with CMC arthritis a lot easier.

Most of these devices can be bought in general stores and online.
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Www.HandsOnCareTherapy.com
Button Hooks with Zipper Pull

Key Turners

Hands-Free Card Holder

Gas Cap Wrench

PenAgain Ergo-Sof™ Grip

Office Max / Office Depot

Zip lock bags with slider

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What is a Certified Hand Therapist?

A CHT is someone who has demonstrated a personal dedication to the profession of hand therapy and a desire for advanced knowledge. A CHT is an advance study after becoming a PT or an OT with more than 5 years of experience. The CHT credential is recognized by many professional organizations as a benchmark for excellence in advanced specialty credentialing in health care.

People value the use of their hands & any loss of function through injury or accident can devastate lives. Anyone with an injury wants nothing but the very best to assure maximal recovery.

A certified hand therapist offers the assurance that the therapist treating them has achieved the highest level of competency in the profession & stays well informed in the field.

Therapists must be knowledgeable about the intricate anatomy, the advanced surgical techniques and the high level of care required in these postoperative therapy programs to become a CHT. They must also remain knowledgeable about changes in hand therapy practice.

Certification is voluntary and is difficult to attain.
To be seen by our Certified Hand Therapist at Hands-On-Care, ask your doctor to write you a prescription to ensure coverage from your insurance.

We accept all Private PPO insurance, Workers Compensation and Medicare patients along with cash payment.

**Saba Kamal** has over 18+ years of experience as a clinician. She has worked as an Occupational Therapist and a Certified Hand Therapist. In addition, she did her Fellowship in Hand Therapy from Texas Woman’s University, in Houston with Baylor alliance.

- She has presented several talks at Local and National level conferences (ASHT: American Society of Hand Therapists and IFSHT: International Federation of Societies of Hand Therapists).
- She has contributed to a book on Arthritis, presented to support groups etc.
- She was the President of the California Chapter of ASHT & has won the best chapter award for her term in 2010 & 2011.
- She is a partner/principal in Advanced Rehab Seminars & provides continuing education seminars to other hand & upper extremity therapists nationwide.