

## Information For The Parent

Serial casting should always be done by a therapist who is experienced in this area. If you have difficulty finding someone, please contact Cindy Servello, OTR at cindy1otr@aol.com for assistance.

Dr. Nath will provide a prescription for the casting. If you do not have a prescription in hand, call the office at 866-675-2200 to obtain one. If Dr. Nath feels that further testing (x-ray, 3D CT Scan, MRI) is needed before the casting, it will be written on the prescription.

## Information For The Therapist

The child should be fully evaluated by the therapist who will be casting the child to ascertain the amount of restriction, what is coming from the shoulder position, and whether or not the shoulder will need to be supported during the casting. Many children with obstetric brachial plexus injury (OBPI) have unstable shoulders and may be in internal rotation which can put them at risk for a radial head dislocation.

Please utilize the lightest casting material possible. Fiberglass casting materials are suggested (Delta Form Conformable, 3M Soft Cast, etc.) Note if the child has a history of skin sensitivities and allergic reactions. Please also note that fiberglass can shrink so allow for sufficient padding.

Proceed slowly with the casting. Generally, the cast is changed 1x/week to allow for muscle relaxation and re-education. Doing the casting too quickly can result in micro-tearing of the muscle fibers and can result in a rebounding effect. Stretching 10-15 degrees at each cast change is considered adequate. Overstretching may cause muscle spasm and pain. Use your expertise and best judgment on how often a child should be re-casted. If the child is extremely tight, the cast may need to be left on for two weeks as one week may not provide enough sustained stretch.

When the child has achieved full range-of-motion, it is imperative that the child continue to wear a night splint. The final cast can often be bi-valved and utilized as the night splint. New splints can be fabricated as well.

## Contraindications For Serial Casting

bone fracture, bone deformity in the elbow that may structurally hinder range of motion, radial head subluxation or dislocation, allergy to casting materials

## Parent Precautions

If there is swelling/tingling/numbness of fingers and/or hand—contact the casting therapist immediately. If there is numbness and/or severe pain and parent cannot reach the therapist—parent should remove the cast immediately (soak and unwrap or cut). If the numbness and/or pain does not resolve within a short time, parent should seek emergency medical attention.