

## Elbow (Half Arm) Air Splint Home Exercise Program

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Use air splint exercises and ideas only after your therapist has provided instructions and reviewed the exercises with you and your family member.

### Advantages of Using the Elbow Air Splint

- Assists with improving range of motion and strength in the weaker arm
- Keeps your elbow straight to help control your arm with less effort during exercise.
- Keeps your elbow straight during activities and exercises so that you can work on strengthening the entire arm.
- Provides compression and neutral warmth which helps relax tight muscles and allows for easier stretching.
- Keeps your hand free so you can work on functional reaching tasks and not worry about your elbow bending.

### Precautions and Care

- Do not overinflate the air splint.
- Do not use over areas of broken skin or open wounds.
- Clean splint weekly with warm soapy water. Allow to dry before using.
- Follow additional instructions for care as provided in the air splint manual.

### To Apply the Elbow Air Splint

- Wear a long sleeved shirt or ask your therapist for stockinette to wear on the area covered by the air splint. The stockinette will help absorb perspiration and can help prevent your skin from getting caught in the zipper.
- Sit comfortably in a chair and stretch out the affected arm.
- Slide the air splint onto the arm with the inflation tube away from your hand so it will be easier for you to inflate by mouth. Try to keep your palm facing up when you slide the air splint over the elbow. This allows for better positioning of the arm during exercises.
- If you are unable to put the splint on by yourself, keep the inflation tube by your hand so that a helper can easily reach the tube.
- Once the air splint is up on the arm, make sure it is evenly positioned above and below the elbow. This ensures that the splint keeps your arm straight after it is inflated.
- Inflate the air splint by mouth (oral inflation is preferred for more consistent pressure) or use a hand held pump. Mouthpieces and air filters are available if others are assisting you with the therapy program.



- Take a deep breath and blow into the inflation tube. Slide the button to close the chamber while you take another breath. Allow for 1-1½ inches of give on the splint when squeezed. **TIP:** It may be easier to have a family member or other person assist in inflating the air splint.

### **To Remove the Air Splint**

- Undo the button on the inflation tube and let the air out. Then slide splint off.
- After removing splint, spend a moment stretching, bending, straightening and turning palm up then down to loosen up any elbow stiffness.
- Leave air splint flat when not in use.

### **When to Use the Elbow Air Splint**

The splint is useful during Passive Range of Motion (PROM), Self-Range of Motion (SRM) and weight bearing exercises. It helps keep the elbow straight, provides extra support and may help make your exercises easier.

### **Exercises**

During these exercises: control arm movement; do not let your arm fall to the bed; always remember to breathe upon exertion.

- Stand with hands on the table and feet shoulder width apart. Rock back and forth and then side to side while your shoulder controls the movements.
- While lying on your back, hold weak arm up towards ceiling. Move arm in circles, side to side, and up and down. Trace the alphabet on the ceiling.
- While lying on your back or side, reach for lightweight items (empty pill bottles, rolled up socks, plastic spice bottles) set in front of you. As you gain more control, move the bottles farther apart and put them on a higher surface.



### **Home Management Tasks**

Wear the splint while doing these tasks at home:

- Set and clear lightweight items from the kitchen table
- Wipe kitchen table after meals
- Dust furniture
- Remove clean laundry from laundry basket placed on the floor
- Remove grocery items from bags placed on a chair; transfer lightweight items to the table or counter
- Reach for towels or socks in the laundry basket; fold and sort
- Stand and sort mail
- Stack paper cups
- Put buttons, coins, or dice in pill bottles lined up on the table.



## Reference

Application of the Urias® Johnstone air splints used in PANat: User guide, Gail Cox Steck, Switzerland, 2009. [www.proactiveapproach.info](http://www.proactiveapproach.info)

## More Information

- Resources for mouthpieces and replacement air splints  
Sammons' Preston, 800-323-5547, [www.sammonspreston.com](http://www.sammonspreston.com)
- Rehab Outlet, 800-933-0965, [www.rehaboutlet.com](http://www.rehaboutlet.com)
- Overstock, [www.overstock.com](http://www.overstock.com)

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