Leak Point Pressures

What are leak point pressures?
Bladder leak point pressures are measured periodically on patients with bladder dysfunction. Most often, these are people with spina bifida or some type of spinal cord injury. The leak point pressure is a measurement of the pressure inside the bladder it takes to cause urine to leak out. The leak point pressure is part of a study called a cystometrogram (CMG). The procedure involves placing a small catheter (tube) into the bladder, emptying the urine then filling the bladder with water while measuring the bladder pressure at the same time. The pressures in the bladder during filling and after leaking, and the volume of water that the bladder will hold before leaking are noted in addition to the leak point pressure itself.

Why are they important?
Leak point pressures are one of the most important indicators to follow in regard to the health of the kidneys (in patients with bladder dysfunction). If the leak point pressure is too high and nothing is done to correct it, kidney damage can occur. By measuring the leak point pressure regularly, problems can be taken care of before the kidneys are damaged by high pressures. In the past, before leak point pressures were measured, many children with bladder dysfunction developed severe kidney damage and even kidney failure; now this is rarely the case.

The leak point pressure may be measured as often as every 3-6 months in an infant or young child, and by adulthood will probably only be checked every 1-3 years.
How is a high leak point pressure treated?

There are several things that can be done to lower a high leak point pressure. Medications and intermittent catheterization are most frequently used. Occasionally cases which are extremely difficult to treat may require surgical intervention.

What is the necessary after-care?

After a leak point pressure is done, the patient may feel some slight discomfort or burning because of the study. Slightly blood-tinged urine may also be seen the day the study is done and should not be cause for alarm. Antibiotics are usually prescribed for several days after the study to prevent any infection from occurring. Any back pain, fever, pus, or more than slightly blood-tinged urine are signs of infection, and if they are present you should call Pediatric Urology.