

Ask a nurse about...

Glycosaminoglycan (GAG) layer replacement therapy



Nurse and Clinical Nurse Lead at Wellspect Healthcare, Bev Collins, answers questions from patients about GAG layer replacement therapy.

In a healthy bladder, there is a natural barrier that protects the bladder lining from the urine. This barrier is called the glycosaminoglycan, or GAG, layer. This protective layer prevents bacteria and irritants found in the urine from coming into direct contact with the bladder tissue. If this barrier is damaged, this protection is lost and over time, can cause damage to these tissues. This damage can lead to a range of problems that cause symptoms such as pain, urgency (the need to go to the toilet immediately) and frequency (the need to go to the toilet more often), as well as urinary tract infections. GAG layer replacement therapy involves administering (instilling) a solution directly into the bladder to help restore this damaged layer, and contains the one or more of the components that the GAG layer is naturally made from.

Q: I have a supra-pubic catheter in place. I also have Bladder Pain Syndrome and have started a course of instillations. Unfortunately, every time I have the instillation (via the catheter) I develop a UTI. Can you make any suggestions as to how I can stop this from happening?

A: Ensuring the bladder instillation/GAG layer replacement therapy is administered using a sterile technique will reduce the risk of infections; your nurse will be able to show you how to do this. The bladder pain syndrome will be helped by the instillation. Using a catheter valve (a tap-like device) to keep as much of the treatment in the bladder for a **minimum** of 30 minutes will allow the GAG layer replacement therapy to work directly on the bladder lining to re-form the protective barrier and aid healing.

Q: Why are there so many different types of GAG layer replacement therapy? How do I choose the one that's right for me?

A: There are a variety of treatments available; some containing one component of the GAG layer (monotherapy), and some containing more than one (combination therapy). The choice of GAG layer replacement therapy will usually be made by your Consultant Urologist. Administration of 'replacement GAGs' helps to repair the damage to the GAG layer and restore the bladder's protective coating; thus easing symptoms.

Q: I am worried about the side effects of having a solution put inside my bladder and also is there a possibility that it could make my symptoms worse?

A: The aim of GAG layer replacement therapy is to help with the chronic inflammation, infection and bladder pain by working directly on the bladder lining to form a protective barrier. Using such a treatment should help ease the symptoms you may be suffering.

Q: Is there any way to have an instillation without feeling that it's burning my urethra?

A: GAG layer replacement therapy can be administered via an intermittent catheter that will be passed through the urethra directly into the bladder. Removing the catheter slightly whilst continuing to administer the last few millilitres of treatment can help to coat the urethra too. There is also an adapter that can be used that sits inside the urethral opening, allowing the therapy to coat the urethra as well as the bladder during instillation. The various ways of administration will be dependent on the type of therapy used.

Q: Do I have to have the therapy at the hospital?

A: There are several options for the administration of GAG layer replacement therapy. You can have treatment given by a nurse in the out-patient clinic; you can be taught how to self-administer; or you can have the treatment delivered at home. Ask your healthcare professional for more information and which option might be best for you.

Q: What is the best way to administer GAG layer replacement therapy?

A: This is a personal choice decided in conjunction with your healthcare professional. Ensuring you are following the product instructions will enable the best results, particularly around the length of time the solution should be kept in your bladder for optimum results.

Q: How long is the treatment course?

A: Some of the therapies are delivered on an ad hoc basis, so as and when you need them, whereas others use a treatment programme schedule, or regimen. Speak to your healthcare professional about this as they'll be able to advise what's best for you.

Q: Can I self-administer the therapy?

A: You can be taught to self-administer the therapy at home to enable treatment to be given as and when as required. A carer or partner can also be taught how to administer the therapy provided your healthcare professional is happy with this.