UPDATE ON THE TREATMENT OF INCONTINENCE

by Dr Bruce Farnsworth

One of the features of incontinence as a medical condition that sets it apart from other medical diseases is the fact that a large number of completely different treatments are available. This tells us that the symptom or sign of incontinence is not a diagnosis in itself. We need a clear diagnosis in order to choose the correct treatment so it is little wonder that there are some patients who respond poorly to treatment when there is no definite diagnosis.

DIAGNOSIS

Most patients with pure stress incontinence can be treated based on a thorough clinical history and examination. Urodynamic testing and imaging is helpful to clarify complicated cases. Conservative management is still preferred to surgery in the first instance and nowadays we use electromagnetic induction therapy (known as "The Chair") as well as specialized physiotherapy.

CONSERVATIVE TREATMENT

The Wave Brilliance or Neocontrol chair is a new weapon in the fight against pelvic muscle weakness. Muscle atrophy following nerve damage is commonplace following childbirth or surgery and cannot be easily reversed. The Wave Brilliance chair provides a means to restore function to damaged and dormant nerves and muscles. Physiotherapy is also effective.

SURGERY

The surgical management of incontinence has undergone a revolution in the last 10 years and Australian doctors were at the forefront of these developments. The first tension free suburethral sling in the world was performed by Peter Petros in Perth in 1986. The Intravaginal Sling (IVS) was designed and initially manufactured in Australia. It was superseded by the Tension Free Vaginal Tape (TVT) which was launched in Australia in 1998. Both these slings were based on the same theory and both were very successful in treating incontinence.

The TVT soon became the most popular suburethral sling around the world but it has also had some problems. The TVT has a very sharp metal tip. Insertion involves a retropubic needle passage which could lead to bladder, bowel or vascular damage. The elastic nature of the TVT tape has caused a higher level of voiding difficulty than similar non - elastic tapes provided by other companies. In 2004 Ethicon released another sling: the TVT - Obturator (TVT - O). This device passes a sling through the obturator foramen from the inside vaginal incision to the outside, emerging in the groin. It gives support to the urethra rather than elevation and creates a "sub urethral hammock" for the urethra to rest on. The Monarc Device (American Medical Systems) is another transobturator sling which creates the same "hammock"support but this time the passage of the needle is from outside to inside.

In a similar way the SPARC device (American Medical Systems) was introduced to do the same job as a TVT sling and is virtually identical other than the needle is passed down from above i.e., from the abdomen to the vagina.

As you can imagine doctors tend to argue the case for one type of sling over another. Now there are over 50 slings available for this purpose around the world all of them similar in some way to the original.

Never satisfied, the medical appliance manufacturers strive for the ultimate incontinence solution and this research has lead to the development of the "mini sling". Believe it or not there are already at least 6 mini - slings on the market around the world.

The TVT Secur was launched in 2006 and was the first mini - sling available in Australia. More recently a new mini - sling (MiniArc) has been launched by American Medical Systems. 4 of these new slings have been performed in the last few months and to date all have been successful. Because there is no external incision and no passage of a needle through the patient's muscles there is minimal pain.

HOW TO KNOW WHAT SLING TO USE ?

Different slings have proven to be helpful in different circumstances. In general the most popular slings in uncomplicated cases are the transobturator slings (Monarc and TVT - O) but a traditional retropubic sling is thought to be best in those women who have undergone previous surgery or have poor urethral function. Dr Farnsworth has recently undergone training in Spain to use the new TOA Adjustable sling (A.M.I. GmbH) which can be tightened or loosened for up to 5 days after surgery. This is particularly helpful in the management of those very difficult patients who have already undergone a number of unsuccessful procedures.

In uncomplicated patients the new mini - slings, especially the MiniArc show great promise.

WHAT ARE THE OTHER TYPES OF TREATMENT AVAILABLE?

Urgency incontinence can occur alone or in combination with stress incontinence. It may be exacerbated by surgery and it may be a very difficult problem to treat. Options include medications such as Oxytrol, Vesicare or Ditropan. There are a number of electrical devices which generate a signal to try and overcome this problem. Botox injections into the wall of the bladder may be helpful but they tend only to last for 12 - 18 months.

Whatever the cause of a patient's incontinence it is important to consider all the possible options for treatment and low risk conservative measures must be the logical first choice.

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