

## CASE REPORT

# Amniotic Fluid for Intractable Overactive Bladder

Red Alinsod, MD, South Coast Urogynecology, Laguna Beach, California – March 10, 2020

## Abstract

### Objective

This study aimed to present a non-drug and non-surgical option with the use of pure amniotic fluid injected into the mid urethral region and bladder trigone area as a treatment for refractory overactive bladder symptoms.

### History

Mrs. B is a vibrant and active 78 year old Caucasian female with prior mesh pelvic reconstructive surgery over 12 years ago. 5 years post operative she suffered from urgency and frequency and was diagnosed with Detrusor Overactivity at a urodynamic study that included a normal cystoscopy. She urinated about 18 times in 24 hours, had severe urgency resulting in wet clothing, and waking up 6-8 times per night. She was placed on anticholinergics and remained on them for over 8 years with reducing efficacy.

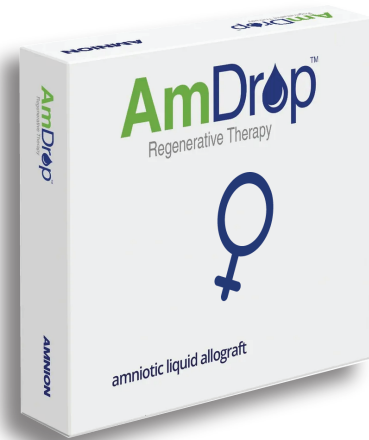
Mirabergon was tried for four years with little relief of symptoms. Pelvic floor physical therapy and a strict "IC Diet" was not effective. She was offered neuromodulation therapy, Bladder Botox, HIFEM. Her quality of life was severely affected. She did not want implants or surgery. The patient was offered in-office amniotic fluid injection.

### Materials and Methods

The patient was instructed not to take any anticholinergics or use Mirabergon. This patient had been off the medications for months. The patient completed multiple validated questionnaires (ICIQ-UI Short Form, UDI 6, Short Form IIQ-7, SSQ, and FSFI). A clear PCR urine test confirmed no bacteria in the urine. A 30% numbing cream was placed 2-3cm into the vaginal canal to provide topical anesthesia for about 30 minutes before the patient arrived at the office.

One cc of AmDrop Amniotic Fluid was mixed with 5cc of injectable saline for a total of 6cc of injectable fluid in a 10 cc syringe with a 27 gauge needle. The cost of amniotic fluid was approximately \$400 per cc. The patient was placed supine in a dorsal lithotomy position. The bottom portion of a vaginal speculum ("Single Speculum") was used to visualize the mid urethra which was cleaned with Betadine.

The mid urethra was identified, 2cm beneath the urethral meatus, and a single puncture was made painlessly with the needle when the patient was asked to give a cough for distraction. The amniotic fluid mixture was injected slowly over one minute as it dissected painlessly around the midurethra and trigone area of the bladder. There was minimal loss of fluid at the completion of the injection. Total treatment time was ten minutes. The patient was sent home to resume all normal activities. She was encouraged to follow the IC Diet and to keep a Bladder Diary that recorded her symptoms daily. She was told that every month she would complete the validated questionnaires and be tracked by the staff. She agreed to weekly phone interviews to track her progress.



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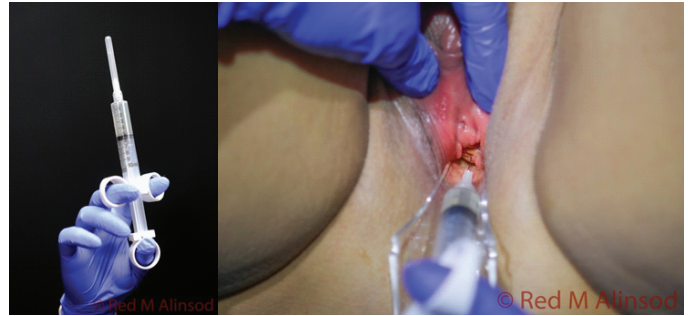
## Abstract (cont'd)

### Results

One week post treatment the patient reported a dramatic reduction in frequency (18 voids/24 hours to less than 10), nocturia (8 to 2), and reduction in urgency. At one month post treatment her frequency was reduced further to less than 8 voids in 24 hours and no nocturia. Her urgency remained “much less.” At two months post treatment the effects were maintained and she no longer complained of urgency, frequency, and nocturia. Monthly evaluations are ongoing.

### Discussion

Amniotic fluid is rich in anti-inflammatory cytokines and multiple growth factors. It has many years of safe use as an immune privileged solution to reduce inflammation in joints, lungs, eyes, and other body locations. Amniotic fluid has been mixed with platelet rich plasma in our practice for the past year to treat overactive bladder. This is the first reported use of amniotic fluid alone for overactive bladder, nocturia, urgency, frequency, urodynamically confirmed detrusor overactivity. With the growing numbers of aging women suffering from overactive bladder comes a need for simple and efficient treatments. Compliance of anticholinergic use and other drugs remains low. Radiofrequency treatments of the bladder at 460 kHz has also been shown to help reduce overactive bladder symptoms without the need for drugs or surgery. Biologic and energy based therapy combinations are being studied.



### Conclusions

Amniotic fluid is exceptionally effective for use as a single injection for overactive bladder. It is safe and with no known side effects. This new treatment modality is very promising for the future cost-effective management of overactive bladder, an inflammatory condition. Continuing studies are ongoing to determine the duration of treatment effects and the ideal time for repeat and touch up treatments.

### Red Alinsod, MD



Dr. Red Alinsod graduated from Loma Linda University School of Medicine in 1986 and completed his OB/GYN residency from Loma Linda University Medical Center in 1990. Dr. Alinsod is instrumental in the development of aesthetic vulvovaginal surgery. He is currently the Medical Director at South Coast Urogynecology, consultant for Thermi and inventor of ThermiVa.