

## A TELEMEDICINE APPROACH FOR ADVANCED TREATMENT OF URGENCY INCONTINENCE ASSOCIATED WITH PARKINSON'S DISEASE IN AN OCTOGENARIAN IN A DEVELOPING COUNTRY IN COLLABORATION WITH AN INDIAN EXPERT CENTRE.

### Hypothesis / aims of study

Many African countries have a lack of experts in incontinence, especially in neuro-urology. Our centre was confronted with several cases of severe incontinence associated with Parkinson's disease, that could not be managed adequately. To test the possibility of managing these patients with telemedicine supported by an Indian hospital, we evaluated the trajectory of one patient during 1 year.

### Study design, materials and methods

An 83 y old patient with Parkinson's disease suffered from severe incontinence and used up to 6 pads/day. The neurological examination showed some atypical findings that were suggestive of normal pressure hydrocephaly. The patient had an abnormal broad-based gait and shuffled and had tremor and rigid movements. He also suffered from mild dementia.

He had a prostatectomy in 2009.

The Parkinson symptoms were refractory to standard medication. A process of telemedicine guidance was set up.

### Results

At the first telemedicine session the clinical examination of the patient was repeated in front of a camera, linked to an remote neurologist. As a result of this session a transfer was arranged to an MRI facility abroad. In the same centre a urodynamic examination was performed.

The MRI revealed a clear normal pressure hydrocephalus. The urodynamic examination revealed neurogenic detrusor overactivity with detrusor pressures up to 70cm H<sub>2</sub>O and a cystometric capacity of 260ml.

In April 2015 an ventriculo-peritoneal shunt was placed in the local university hospital as a treatment for the normal pressure hydrocephalus.

Intensive physiotherapy, including Kegel exercises was started.

In June 2015 a second telemedicine session was organised. At that time the patient had an improved gait and cognitive function, but still suffered from urgency incontinence. After the evaluation by the telemedicine team, Trosipium Chloride and phenytoin were started.

In February 2016 the patient had regained normal gait, had a major improvement of his cognitive function and was continent.

### Interpretation of results

In developing countries people with urgency incontinence due to neurological conditions are often neglected. The lack of appropriate investigational tools and of appropriate medication, due to a poor health care organisation by the government is the major problem.

This case study shows that a telemedicine approach can help in selecting the right patients for further investigation and treatment. Also the telemedicine follow-up allows for an appropriate long-term management of these patients. The local team cannot only improve its knowledge about more complex problems, but can also deliver better care to the local community.

### Concluding message

Telemedicine can be a helpful tool in developing countries to manage complex cases of neurological bladder and sphincter dysfunction.

### Disclosures

**Funding:** None **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** Not applicable to standard medical treatment. This is a chart review of 1 patient. **Helsinki:** Yes **Informed Consent:** Yes