

INTRODUCTION:

Through technological innovations based information and communication technologies (ICT), advantageous telediagnostic systems can be developed to improve the health care of remote populations (1). In the context of universal coverage and the efficient use of available resources, there is a favorable opportunity to develop telemedicine towards an integrated ecosystem to improve health care in remote locations without access to specialists. This study, performed by the Telemedicine Unit (MoH) in collaboration with the Biomedical Engineering Dept (IICS-UNA) and the Basque Country University (UPV/EHU) evaluated a telediagnostic system implemented in 2014 in public health. The results of a cost utility analysis for this telediagnosis project in remote, regional and district hospitals in Paraguay are presented.

METHODS:

This is a prospective study, where the results of using telediagnosis implemented in remote hospitals over three years 2014–16 were evaluated. For these purposes, a utility analysis was carried out by comparing the cost of performing telediagnosis versus performing it “face to face” in a diagnosis center in the capital city.

RESULTS:

During the study 182,406 remote diagnoses were performed in the fifty-four remote hospitals using the telediagnosis tool. Of the total, 37.3 percent (68,085) corresponded to tomography (CT), 62.0 percent (113,059) to electrocardiography (ECG), 0.68 percent (1,243) to electroencephalography (EEG) and 0.01 percent (19) to ultrasound studies. The average cost of a tele-tomography, tele-ECG and tele-ultrasound was USD2.6, and USD8.6 for tele-EEG, respectively. The cost reduction through the telediagnosis was 26.4 times for tomography, 4.5 times for ECG, 8.0 times for EEG and 8.3 times for ultrasound. The cost utility analysis performed demonstrates an economic benefit of USD12.9 million to the citizens of the fifty-four communities included in this project.

CONCLUSIONS:

Despite the potential benefit of the telediagnosis (2) to facilitate the universal coverage, and optimize the use of scarce human and health financial resources shown in this study, other important aspects such as acceptance of the technology, patient satisfaction and a widespread use-assessment should be analyzed (3) before a large diffusion.

REFERENCES:

1. Galván P, Velázquez M, Benítez G, et al. Impacto en la salud pública del sistema de telediagnóstico implementado en hospitales regionales y distritales del Paraguay. *Rev Panam Salud Pública*. 2016;40(4):250–5.
2. de la Torre-Díez I, López-Coronado M, Vaca C, Aguado JS, de Castro C. Cost-utility and cost-effectiveness studies of telemedicine, electronic, and mobile health systems in the literature: a systematic review. *Telemed J E Health*. 2015;21(2):81–5. doi: 10.1089/tmj.2014.0053.
3. Ekeland AG, Bowes A, Flottorp S. Effectiveness of telemedicine: a systematic review of reviews. *Int J Med Inform*. 2010;79(11):736–71. doi: 10.1016/j.ijmedinf.2010.08.006.

PP042 Rapid Health Technology Assessment - No Flare Reaction With Synolis V-A In Knee Osteoarthritis

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INTRODUCTION:

The Changi General Hospital (CGH) carries out viscosupplementation for patients with knee osteoarthritis through intra-articular hyaluronic acid injections, using Synvisc or Synvisc-One (containing hylan G-F 20). Some patients on Synvisc are susceptible to flare or pseudoseptic reaction on repeated therapy. It

was proposed to procure Synolis V-A intra-articular injection as an alternative for these patients.

METHODS:

A rapid health technology assessment was carried out on the following PICO elements: Population - Patients with knee osteoarthritis, Intervention - Synolis V-A, Comparator - Synvisc, Outcomes - Risk of flare reaction/pseudoseptic arthritis.

Based on a preliminary scan of the literature, a simple search was conducted for all publications on Synolis V-A, and for reviews on the risk of flare/pseudoseptic reaction with Synvisc.

RESULTS:

No publications reporting on flare/pseudoseptic reactions with Synolis V-A were found. There are limited case series of patients treated with Synolis V-A, with most evidence coming from a prospective post-marketing surveillance case series, which showed reduced pain and functional impairment at 6 months. Adverse reactions were rare. CGH's own small trial of Synolis V-A did not show any flare reactions.

In contrast, flare/pseudoseptic reactions with Synvisc are an established phenomenon. A systematic review of randomized controlled trials documented one flare reaction among 381 patients (0.26 percent) in Synvisc compared to none in patients receiving other hyaluronan products. Small case series of patients on Synvisc showed incidences of flare reaction of 21 percent (in repeat treatment) to 27 percent. CGH's own experience is that flare occurs in 4.7 percent of patients on Synvisc.

CONCLUSIONS:

It is reasonable for the hospital to stock an alternative for patients who show repeated flare reactions to Synvisc. The limited evidence base is not a barrier to using Synolis V-A as an alternative, given the local experience.

PP044 Adherence To Enzyme Replacement Therapy In Gaucher Disease

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INTRODUCTION:

Gaucher disease (GD) is a genetic autosomic disorder for which treatment has been funded by the Brazilian government since the 1990s. In our state most patients are treated with enzyme replacement therapy (ERT) and followed by our Reference Center under the recommendation of the Ministry of Health Brazilian guidelines. There is a lack in the literature about adherence of patients to treatment. The objective was to describe adherence to the treatment in a cohort of all GD patients in the southern state of Brazil.

METHODS:

This was a cohort study of all GD patients treated with velaglucerase α , taliglucerase α and imiglucerase from January 2010 to January 2015. Adherence was measured as recommended by the Brazilian guidelines as to perform more than 50 percent of the anticipated infusions per year.

RESULTS:

Our study included thirty-seven patients of both genders. Doses of ERT varied from 15 to 45IU/kg for type 1 patients and from 30 to 60 IU/kg for type 3 patients. A mean of 83 percent of anticipated infusions were performed and from all patients only one did not adhere to the treatment during the 5 years of our study. The majority of the patients performed at least 50 percent of all anticipated infusions.

CONCLUSIONS:

We noted a very high rate of adherence to treatment with a very few adverse effects. Our data might be showing that the very high rate of adherence in these
