The authors declare that they have no competing interest.

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**CO03**

Adolescent idiopathic scoliosis: Impact of a physical rehabilitation program performed at home on the exercise capacity

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**Objective** The “Centre médical & pédagogique (CM&P) de Rennes-Beaujoue” prepares adolescents for surgical treatment of their idiopathic scoliosis (IS). This surgery has respiratory short-term consequences to the forefront of immediate complications. Two years after the surgery, the ventilatory status is correlated to pre-operative pulmonary function. The objective of the present work is to evaluate the effects of our preparation program.

**Materials/patients and methods** Eight teenagers followed our at home preparation program, including aerobic training, inspiratory muscle training and chest mobilizations during 2 months. The patients underwent 6-min walk tests (6MWT) before and after rehabilitation.

**Results** 6MWT distance increased by $62 \pm 22$ m ($p = 0.0547$). Forced vital capacity (FVC) increased by 4.73% ($p = 0.0298$), the forced expiratory volume in 1 second (FEV1) by 5.23% ($p = 0.0497$), maximal expiratory pressure (MEP) by 28% ($p = 0.0421$) and inspiratory (MIP) by 64% ($p = 0.0156$). The quality of life has not been altered.

**Discussion/conclusion** With a similar population, V.L. dos Santos Alves et al. [1] showed a 6MWT distance increase of 128 m. Protocol was different: the amount of prescribed physical activity was higher (1080 MET minute/week vs 600) and training was directly supervised by a physiotherapist. This supervision limited compliance problems among adolescents. Our program increases the FVC, FEV1 and respiratory pressures. These parameters are essential in the prevention of immediate postoperative complications and are predicting better respiratory function. We did not show improvement in 6MWT distance. A more intensive and directly supervised aerobic training program would be more effective.

**Keywords** Adolescent idiopathic scoliosis; Surgery; Chest physical therapy

**Disclosure of interest** The authors have not supplied their declaration of competing interest.

Reference


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**CO04**

Home services in social speech-language pathology for people with aphasia and their family

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**Opinion/Feedback** People with aphasia (PWA) and their loved ones claim that one of their biggest needs is to develop efficient means to communicate better “together”. Researchers suggest that conversation partner training (CPT), a training for a PWA and a loved one aiming to use communication strategies in conversations, would be most promising regarding this need (e.g. Simmons-Mackie et al., 2010). The purpose of this presentation is to report the development and the home services organisation of the social speech-language pathology part of the “service aux proches d’une personne aphasique” (SAPPA; services to caregivers of a person with aphasia). The SAPPA is a service offered by the Association québécoise des personnes aphasiques (AQPA) and financed by the APPUI aux aidants–Montréal. It allows PWA and their family living on the Montreal Island to receive free home service in CPT given by a speech-language pathologist trained to this approach. The organisation of SAPPA will be briefly described. Criteria used to evaluate public health services in Québec will be employed to evaluate the quality of SAPPA and the issues encountered: services accessibility (accessibility; equity of access), services quality (effectiveness; security; responsiveness; continuity) and resources optimisation (efficiency; viability).

Attuned services to the needs of PWA and their loved ones were developed. Thanks to the support of AQPA–Montréal and our research team, this type of services is now developing elsewhere in Quebec.

**Disclosure of interest** The author has not supplied his/her declaration of competing interest.

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**CO05**

Role of a specialized Alzheimer team in pragmatic analysis of loss of autonomy

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**Objective** Loss of autonomy linked to the existence of a neurodegenerative Alzheimer’s disease weakens living conditions in patients’ homes. The measure 6 of the 2008–2012 Alzheimer’s plan has enabled the creation of specialized teams Alzheimer’s (ESA) to intervene at a stage beginner to moderate disease. This study aims to highlight the loss of autonomy beginners to moderate Alzheimer’s patients and to analyze the population supported by ESA on a 6-months period.

**Materials/patients and methods** Retrospective analysis of the population supported by ESA Saint Etienne since October 2014 to May 2015. Quantitative analysis, descriptive questionnaire, in a subgroup of patients, loss of autonomy through stock standardized occupational therapy. Ed teams Alzheimer’s (ESA) to intervene at a stage beginner to moderate disease. This study aims to highlight the loss of autonomy beginners to moderate Alzheimer’s patients and to analyze the population supported by ESA on a 6-month period.

**Results** Sixty-nine patients have been supported, with mean age of 81.5 years with a sex ratio of 0.44 and an average MMS to 18.8
All had a significant loss of autonomy in daily living (ADL average to 4.36 (± 1.5) and IADL 1.3/4 (± 1.1). Twelve patients have benefited from further evaluation by an occupational therapist. The most affected were the control activities of the current equipment, relational and social activities, meal preparation and housekeeping. An increase in the aid plan was carried out in two third of patients at the end of this support.

Discussion/conclusion Loss of autonomy occurs in the early stages of Alzheimer’s disease. Allowing early treatment at home, the ESA play an important role in home care for patients with Alzheimer's disease.

Keywords Alzheimer; Autonomy; Ergotherapy

Disclosure of interest The authors have not supplied their declaration of competing interest.

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CO06 Mobile team rehabilitation–rehabilitation: An activity outside. Results of 3 years of functioning to the Pôle Saint-Helier

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Opinion/Feedback Many mobile teams were created over the past decade in various medical specialties including physical medicine and rehabilitation (MPR). The Pôle Saint-Helier has created a mobile team of rehabilitation–reintegration (EM2R) in December 2012 with support from the Regional Health Agency of Brittany. It operates on the health territory No. 5 of Brittany near people experiencing neurological disability. Its main mission is to implement the necessary devices to facilitate the home return of people hospitalized after a neurological event or maintaining to home people with neurological disorders. The number of supported annual is about 200, either for 2015: 20 requests per month. People with brain lesions account for two third of the population, mean age 60 years, with a high degree of dependence. A minimum of two professionals involved by patient and a variable number and term of interventions depending on pathologies. Occupational therapy represents the majority of requests for intervention.

We will discussed based of three years of functioning about:

– the innovative nature of this activity: supported to people with brain tumor lesions that usually have little access to the MPR, collaborations with mobile teams of support and palliative care and hospital to home, formation and education of caregivers;

– the increase of supported people with neurodegenerative illness such as ALS that needs an access to care fast;

– the notion of alternative to the MPR care offer in link especially with the recommendations of SOFMER and HAS on the organization of care pathway of strokes [1,2].

Keywords Mobile team; Care pathway; Neurological diseases

Disclosure of interest The authors declare that they have no competing interest.

References


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CO07 Home base rehabilitation and telerehabilitation: A promising strategy to improve service offering in patient with chronic lung disease

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Opinion/Feedback With more than 700,000 patients, chronic obstructive pulmonary disease (COPD), a sickness characterized by a progressive alteration of lungs function, presents a major burden in Canada. Even though COPD is primarily a respiratory system disease, progressive sedentary lifestyle, reduced exercise capacity and a restricted participation in daily life activities, which all contribute to a poor health-related quality of life are common consequences of the disease progression.

Cornerstone of the COPD management, there is unequivocal evidence that pulmonary rehabilitation is the most effective treatment to improve shortness of breath, exercise tolerance and quality of life of patients with COPD. Since 2001, pulmonary rehabilitation is thus considered an essential intervention in the treatment of lungs disease. Usually delivered on an outpatient or in-hospital basis, accessibility and adherence to this intervention strategy remains limited. Thus, despite its clinical and socio-economic relevance, several surveys across Canada and around the world show that pulmonary rehabilitation is only available for less than 2% of patients with COPD. Pulmonary rehabilitation is not even part of the range of opportunities available to patients in half of the regions of the province of Quebec.

Bringing new insights to improve health care organisation and accessibility, several studies have shown that home-based pulmonary rehabilitation are as effective and safe as rehabilitation delivered in hospital or in rehabilitation center. In addition, telerehabilitation, a telehealth application that uses telecommunications technologies to rehabilitation services, is a promising new approach that could also contribute to improving accessibility and adherence to pulmonary rehabilitation.

The aim of this presentation is to report the latest consensus regarding pulmonary rehabilitation and to discuss how home-based rehabilitation and telerehabilitation could be considered to improve pulmonary rehabilitation service offering.

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CO08 Effectiveness of power wheelchair simulator training, delivered at home, on wheelchair driving skills

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Objective Use of a power wheelchair (PW) can improve quality of life and participation in individuals with mobility impairments. PW skills training is generally seen as insufficient by both clinicians and PW users. A virtual reality (VR) simulator may be helpful in improving PW driving skills, when used in addition to regular training. In previous work, challenging PW driving activities have been identified through interviews with expert clinicians and PW