POSTER ABSTRACT

An integrated, cost-effective efficient chain to deliver botulinum toxin in optimal conditions.

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Introduction: Botulinum toxin is increasingly used in clinical care for a variety of conditions that include facial spasms, bleharospasms, and other abnormal movement disorders. Its periodic administration, every three months, together with the individual dosages needed for each patient requires an integrated approach to deliver an optimal and cost-effective administration.

Botulinum toxin is an expensive therapy, its preparation is time consuming, and the dose needs to be adjusted for each patient.

Practice change implemented: The Hospital de Galdakao (Basque country, Spain) has developed an integrated team for the regular administration of botulinum toxin, composed of pharmacists, nurses, and neurologists.

The most commonly used botulinum toxin requires cold storage and a rapid administration once the vials are open (they cannot be kept for more than a few hours at room temperature).

Aim: The main goal of this team is to provide an integrated approach to the care of patients that allows for an optimal administration of botulinum toxin that can be continuously monitored for improvement.

Timeline: The team prepares and delivers the required doses of botulinum toxin every three months. The days of administration are scheduled at the beginning of each year (4 times a year).

During the day of administration, all the required doses of botulinum toxin are prepared under laminar flow hood in the Pharmacy by expert personnel that adjusts the number of vials to our patients’ requirements. This allows an optimal utilization of the required toxin units, avoiding discarding partially used vials. Toxin vials contain 100 IU each, and need to be kept at 4°C during transportation and before use.

After preparation by the Pharmacy department, the toxin is transported immediately to the Neurology Department, where it is sequentially administered to over 60 patients per session by several Neurologists.

A video supports this presentation.

Highlights (innovation, Impact and outcomes): The creation of an integrated team for the administration of botulinum toxin represents an innovative and integrated approach where different Services of the Hospital work together to allow for an administration of botulinum toxin to a large number of patients in one single session, assures that toxin is administered under the best possible
conditions, reduces the time of preparation, and guarantees the best efficiency, since dosages are optimally adjusted to the number of patients, thus minimizing the amount of unused toxin.

**Comments on sustainability:** Such an approach results in optimal cost-effectiveness for a large number of patients that require a periodic administration of botulinum toxin every three months, and thus makes their care more sustainable.

**Comments on transferability:** The Galdakao team for the preparation and administration of botulinum toxin can be transferable to other units, not just in our area but elsewhere. However, the methods can vary and modified depending on location and on specific circumstances.

**Conclusions:** The availability of an integrated, multispecialty team to deliver periodic administration of botulinum toxin is essential to provide a comprehensive, optimal and cost-effective care to our patients.

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**Keywords:** botulinum toxin; administration; abnormal movements