RESULTS
Fresh SVF comprised >50% dead cells of miscellaneous mixed cell type, collagen and capillary fragments. Of the living cells, even after 2 days in culture <10% were MSCs. The mean number of MSCs per gram of adipose tissue was 51,872 (+/−23,648) cells per gram.

Cryo-freezing of SVF further reduced the number of viable stem cells down to <2% of the total cells.

STATEMENT
The low % of MSC yield, low viability and wide variation in MSC yield from SVF makes it impossible for veterinary practitioners to treat osteoarthritis in dogs with a standardized number of MSCs when using a same day SVF therapy. Culture expanded MSCs allow for a standardized, quality controlled, viability tested cell product.

Evaluation of functional neurorehabilitation effect: dog thoracolombar intervertebral disc disease study

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OBJECTIVES
This study is regarding the functional neurorehabilitation role in the thoracolombar intervertebral disc disease, a common disease causing neurologic dysfunction in dogs. Functional neurorehabilitation bases on spinal cord properties like neuroplasticity, neuromodulation and memorization. We aimed to know functional neurorehabilitation role on recovery of ambulatory and functional capacity in dogs with the mentioned disease regardless the applied management, conservative or chirurgic, and what was the expected recovery time.

METHODS
The study included 98 dogs, 52 males and 46 females, with ages between 2 and 16 years, average weight of 14 kg, several breeds, grade 0 to 3, according to Frankel’s Modified Scale. 58 type I Hansen hernia and 40 type II Hansen hernia, located between 9th thoracic and 4th lumbar vertebra, previously diagnosed, within the period of one year. Management was conservative or chirurgic and all were referred to functional neurorehabilitation in the same rehabilitation center. Protocol included electromyostimulation techniques, terrestrial, aquatic locomotor training and complementary modalities.

RESULTS
Functional locomotion was achieved in 80.7%. Although the presence of deep pain perception, in 75.5% cases, had a main role in the success, it was not limiting since 4.0% achieve fictitious functional locomotion. It was also proved that it’s necessary in average 2 months to achieve a functional ambulatory state independently of the type of hernia and or applied treatment.

STATEMENT
We concluded that clinical success is a multifactorial conjugation of factors. However, functional neurorehabilitation proved its important and integrative role on recovery of these patients with an average of 2 months to achieve it.