

Clinical Highlight • VT Procedure: Marsden Ball Games

Morgan Ollinger, OD • Southern College of Optometry • Memphis, Tennessee



Morgan Ollinger, OD
Memphis, Tennessee

Clinical Instructor at Southern College of Optometry

Michigan College of Optometry, Pediatric Optometry, 2017

University of Waterloo School of Optometry, 2016

University of Regina, Biology, 2009-2012

One vision therapy tool that I find to be both versatile and fun is the Marsden ball. This consists of a baseball-sized ball attached to a string that is suspended from the ceiling. The ball can have letters and numbers drawn on it and some versions have red-green components to address suppression issues.

To begin, the therapist should gently swing the ball towards the patient. The patient should follow the ball with their eyes through the entire procedure, and should use the palm of one hand to gently hit the ball back to the therapist. At this basic level, the activity encourages strengthening pursuit movements, and also helps to reinforce coordination between the eyes and the hands. Additionally, all forms of this activity aid your patient in improving visual-spatial abilities. For the cherry on top, a solid core rubber ball with a length of string attached to it can be inexpensively produced, and easily sent home with your patient for use during their home therapy.

As your patient becomes able to track the ball effectively, and consistently returns the ball, the procedure can be varied. Instead of a full hand, your patient can use only their pointer finger to return the ball. This will encourage finer motor coordination, relative to using the entire hand. The patient can alternate hands, or the therapist can call "right" or "left," and the patient must use the correct hand to return the ball. This can aid their understanding of laterality.

To increase the cognitive demand, the patient is asked to call out a letter or number from the ball before they return it to the therapist. Once this becomes easy, the patient is asked to call out a word that begins with a letter that they see. Distractions can also be added to the activity. For example, the therapist can ask questions while the ball games are being performed. By loading the activity, you are helping to make the visual skills associated with these games more automatic. This will make it easier for the patient to transfer these skills into their daily life, and to ultimately function at their desired level.

Marsden ball games are an effective technique to use early on in therapy, both because of the relatively low initial difficulty, and fun for many patients. If your



patient is struggling with the most basic level of this activity, there are a couple of modifications that you can make. Reducing the speed and arc of the ball can make it easier for your patient to track and react to the ball. If necessary, simply have your patient track the ball with their eyes, without using their hand to hit the ball back to the therapist. Once they are more confident, and able to track more effectively, the hand portion can be re-introduced.

While this is by no means an exhaustive list of everything you can do with a Marsden ball, I hope that this provides a good introduction to its use. The Marsden ball is an effective tool for helping your patient to understand visual-spatial relationships, as well as for improving tracking abilities and eye-hand coordination.