

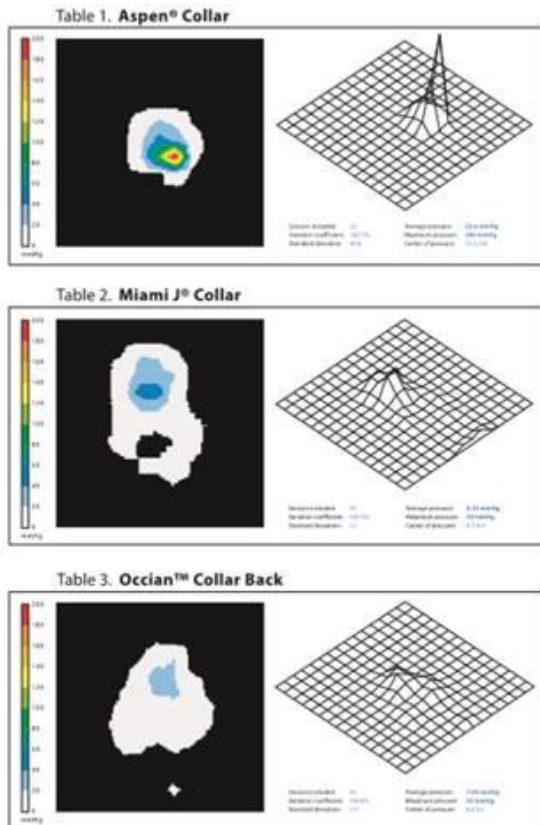
Miami J Literature

Randomised controlled trial by Mayo in 2016:

Compares cervical ROM restriction and craniofacial tissue-interface pressure (mandible and occiput) in upright and supine positions with 2 adjustable (Aspen Vista/Miami J Advanced) and 2 standard collars (Miami J/Aspen sized collars). Conclusion – Miami J sized collar had the lowest craniofacial tissue-interface pressure in both sites and positions. All collars restricted cervical ROM.

Independent Investigation by Jeffrey Nemeth (P&O):

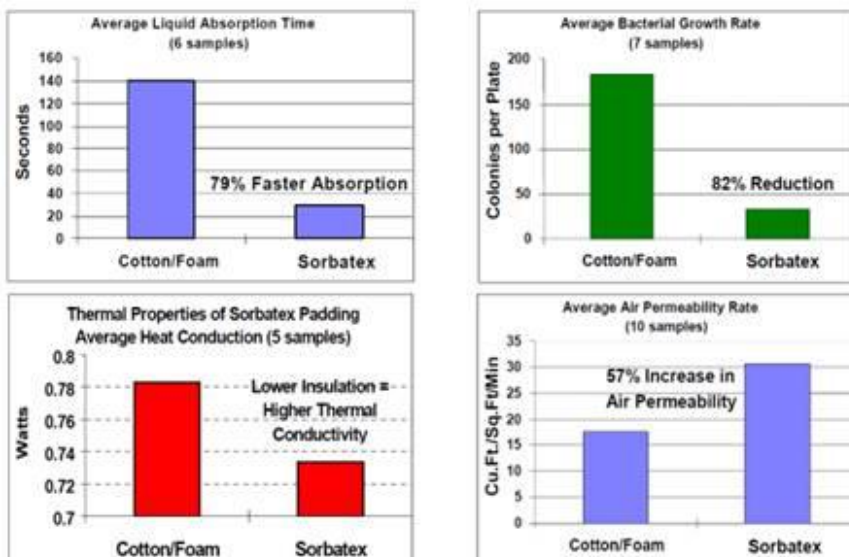
Compares occipital pressure mapping between the Aspen, Miami J sized collar and Miami J collar with the [Miami J Occian](#) back.



The Miami J with the Occian back had no pressure spikes, and the lowest pressure readings. The Miami J standard collar had minimal pressure spikes. The Aspen collar had noticeable pressure spikes, and the highest peak pressure.

Independent Investigation by Grundy Laboratory:

Comparison between the Sorbatex lining (Miami J range) over a cotton/foam pad.



Conclusion from the independent University testing shows Sorbatex is superior in liquid absorption, preventing bacterial growth, conducting heat away from the body and air permeability than a cotton/foam pad.

Investigation by Trauma Nurses in the US - sponsored by Jerome Medical (2002):

Goniometric analysis of cervical and cervicothoracic orthoses in restricting cervical ROM. Comparison between the Miami J sized collar, Miami J with thoracic extension, Aspen sized collar and Aspen with thoracic extension.

	Flexion	Extension	Combined Flexion/Extension	Total Axial Rotation	Total Lateral Bending
Unrestricted	100	100	100	100	100
Aspen Collar	38.4	39.6	38.7	39.0	62.8
Aspen CTO	21.8	31.2	26.3	33.9*	49.5
Miami J Collar	14.4	27.0*	20.9	23.2	44.3
Miami JTO	10.2	20.7*	15.5	20.6*	39.3*

Table 1: Mean Percentages of Unrestricted Motion Allowed

The study demonstrated that the cervical collars with thoracic extension enhances the immobilisation of the cervical spine as compared with the cervical collar alone. The Miami JTO was superior to the Aspen CTO. The Miami JTO demonstrated statistically superior immobilisation in flexion, combined flexion/extension, total axial rotation and total lateral bending compared to the Aspen CTO.

As the Miami J Select is new to the market there hasn't been any external studies completed (yet!). However, extensive internal tests for proper immobilisation and pressure mapping have been performed to ensure the Miami J Select meets or exceeds the high standards of the Miami J standard collars. Internal biomechanical studies show that the Miami J Select replicates the 3-plane immobilisation, comfort and low tissue interface pressure of the other market leaders, including the Miami J sized collar.