



NATIONAL BAROMEDICAL SERVICES, INC.

July 19, 2006

Attn: Barbara Saint John
Clinical Research Director
IFLOW
20202 Windrow Drive
Lake Forest, CA 92630

Dear: Barbara

National Baromedical Services (www.baromedical.com) is a leading provider of hyperbaric medicine and a leading hyperbaric educator.


NBS had received several enquiries regarding the appropriateness and suitability of the On-Q Painbuster during hyperbaric oxygen therapy procedures. We undertook, therefore, limited testing of this device in order to evaluate the effects of pressure on the pump's integrity and its flow rate. The details of this testing and the results are to be found in the attached report.

These results suggest that On-Q Painbuster could effectively be used in the hyperbaric setting, and may represent another market for your product. Our plan should we receive additional inquiries regarding the use of your product in a hyperbaric chamber, is to refer them to your company. The testing we performed was limited in its scope and not intended to create any express or implied warranties on our part as to the suitability for use of the On-Q Painbuster in a hyperbaric chamber. The results of our testing are provided without warranty of any kind. Further NBS does not warrant, the test results in terms of correctness, accuracy, reliability, currentness, or otherwise. We would hope that the results of our testing would lead your company to do further evaluation, so that you can determine if your company wants to recommend the On-Q Painbuster for routine use in hyperbaric chambers. If you would like our assistance with further testing, we would be happy to discuss that.

Should you have any further questions, please feel free to contact me.

Enclosure

Sincerely,



Dick Clarke
President

Flow Rate of the On-Q PainBuster under Hyperbaric Pressure

Introduction

Testing was undertaken on the On-Q PainBuster to determine the effects of compressibility under typical hyperbaric chambers conditions. This testing was designed to determine the rate(s) of infusion that would be expected under hyperbaric pressure. Under normobaric conditions, the standard administration rate of the On-Q PainBuster is 5ml/hr. Due to multiple variables such as viscosity, catheter tip placement, temperature, and volume, these results may vary.

Methods

Testing was performed in a precise manner as follows:

At normal room temperature, the On-Q PainBuster was filled with 240ml of water and placed in the hyperbaric chamber with the catheter tip located approximately 4cm above the reservoir (flow upward) and compressed to 2.5 atmospheres absolute. The On-Q PainBuster was compressed for 7 minutes, at pressure for 110 minutes, and decompressed for 7 minutes for a total time of 124 minutes. After testing the On-Q PainBuster under pressure, it was refilled to 240cc, placed on a counter surface, and again tested for 124 minutes at normal room temperature, with the flow of the catheter in an upward flowing position to duplicate exactly the same circumstances as in the hyperbaric chamber. The output of the On-Q PainBuster during each testing phase was measured in a 10cc syringe. This exact testing was repeated twice.

Results

Testing Phase 1: Hyperbaric Chamber = 11ml output of water
Counter Surface = 11ml output of water

Testing Phase 2: Hyperbaric Chamber = 11ml output of water
Counter Surface = 11ml output of water

Testing Phase 3: Hyperbaric Chamber = 11ml output of water
Counter Surface = 11ml output of water

Conclusion

As shown above, the results of this study are consistent. The On-Q PainBuster was not compromised and has proven safe in a hyperbaric environment. Also, it has been demonstrated that the On-Q Pain Buster's rate of infusion remains the same even under typical hyperbaric conditions.

Respectfully Submitted,

Hope Stack, RN, BSN