

The DOG(MA)™ Collar

The world's first fully integrated resuscitation system

Cutting edge care from the Parker Bros. Laboratories

(C) 2014

After more than 50 years of research and careful design we at the Parker Brothers Laboratories are pleased to announce the release of the world's first fully-integrated resuscitation device. The DOG(MA)TM Collar represents the latest in cutting edge resuscitation care. This all-inone, multifunctional amalgamation of physics and pharmacological technology stands to revolutionise the practice of Emergency Medicine and Critical Care.

The DOG(MA) collar is the perfect cervical immobilisation device, but it is so much more. The MA stands for 'maximally aggressive' care. We at Parker Brothers Laboratories believe that you, the clinician, should be able to practice maximally aggressive resuscitation. With the DOG(MA) collar you can not only do your best - you can also do the most to your patient.

Work on this groundbreaking device started way back in 1956 when visionary resuscitationist - Prof. Percival Piltdown started experimenting with a series of random

gimmicks and manoeuvres and eventually a few of them stuck. We are forever indebted to his many long hours spent trying to improve the lot of the slightly scared, the nearly dead and recently deceased.

Tragically Professor Piltdown succumbed to his own fervour in 1977 when an experimental transpinal cardiac compression device malfunctioned. He will go down in history as one of the great self-experimenting medical pioneers of the twentieth century.

In the years that followed many great medical minds added their own beliefs and eponyms to the art of resuscitation. The DOG(MA) Collar combines all of these historically-tested techniques into one simple, easy to apply and colourful device.

The DOG(MA) Collar is so easy to use that even the simplest rural clinician with limited training is able to provide care which expert witnesses agree is the "gold standard" in all of the shiniest metropolitan tertiary trauma centres.

WANT TO KNOW MORE?

Check out these ground-breaking features!

The COLLAR

We started with a standard Stiff-neck collar and made it sexier.

The addition of high-visibility, reflective, radio-opaque stripes make it impossible for the clinician to forget that the collar is still applied and fulfilling it's many vital functions.

The DOG(MA) collar differs to outdated standard C-spine collars in that the FOAM padding has been removed. Patients are fully aware of the contact points with the skull, neck and chest - this provides valuable bio-feedback which reinforces the need to lay absolutely still and avoid potential movement of the spine.

The collar is truly one-size-fits-all. No more worry about neck dimensions - just whack it on and carry on with your assessment.

FRACTURE FIXATION TECHNOLOGY

In a world first - the collar has heavy duty adhesive patches on the posterior surface which is designed to work with our new range of rigid spinal boards - once the two are approximated it becomes impossible for the patient to move the head from the ideal position.

In observational studies even highly agitated patients who flail about on the gurney are unable to move the neck - thus protecting the delicate cervical spine.

The chemical properties of this novel adhesive mean that it can only be dissolved by gentle irradiation. Manufacturer recommends minimum 5 - 10 mSv to ensure complete DOG(MA) lysis of adhesive.

COMING SOON from Parker Bros. Laboratories:

The ADAPT TM Pen.

Never worry about discharging an elderly patient following a "funny turn" again!

This amazing device allows patients to self-administer preset dosages of adrenaline, dabigatran and tPA in the comfort of their own home.

This device is so easy to use it has been taken up by many inpatient units for those late night ward calls.

Remember - sometimes treatment is more important than diagnosis!

The SELLICK Module

Here is the true genius of the system. Prof. Piltdown's greatest innovation was the addition of an automated cricoid pressure plunger to the DOG(MA) Collar allows you to ensure that perfect cricoid pressure is applied throughout your resuscitation.

No more relying on the most junior nurse, no more halfarsed attempts at oesophageal squashing. With this device you get 30 Newtons, first time - everytime!

The latest model of the DOG(MA) collar allows 3 settings for cricoid pressure:

- **Full on**: 30 Newtons all the way baby!
- Full Off: Not recommended**

- **Hover:** for those moments of doubt when the tube just won't pass. Don't remove the pressure - just HOVER!

[NB: the pressure meter will continue to show 30N whilst in HOVER mode regardless of actual application. In the event of potential medicolegal fallout a continuous pressure-wave print out can be placed directly into the patient's record for safekeeping.]

The optional Wi-Fi remote control unit allows the team leader to control the cricoid pressure with precision and removes the need to communicate with other team members during the busy moments around attempted intubation.

Future development will see this feature extended to commercial 4G networks - meaning that whole resuscitations could be run from the call room, or even the comfort of the ED physicians own bed, bar or car.

¹LATEST NEWS: we have just released a fully functional iOS app which seamlessly integrates the DOG(MA) Collar's Wi-fi function into your iPhone. [NB: no plans for Android equivalent at this time.]

** Not recommended by our expert panel of retired Anaesthetists and Medical Defence Organisation lawyers.

JVP Subtraction Software (JSS)

The JVP is the window to the soul of resuscitation. Knowing the JVP means you know the CVP and hence the right-sided pressures. f you know the preload - then fluid management becomes a simple MORE? vs. LESS decision. More saline or a push of Lasix? Easy!

Traditional cervical collars have the drawback of obscuring the JVP from view.

The DOG(MA) Collar contains super-sensitive manometry sensors which measure the JVP 3000 times per second. The collar then calculates its own application

4

pressure (determined by the enthusiasm of the prehospital paramedic) and subtracts this from the measured JVP to give a real-time CVP estimation.

Multiple studies have shown the JSS to correlate extremely well with concurrent Swan-Ganz wedge pressures right down to a fraction of a mm of Hg.

CRYOCERVIX SWITCH

Therapeutic hypothermia has a long and joyous tradition in the medical literature for the management of patients' with prehospital cardiac arrest.

The DOG(MA) Collar is the first device specifically designed for trauma patients which allows near-instant cooling of the carotid blood flow to 23 degrees.

Powerful cryochambers can be activated at the flick of a switch to get that brain to where you want it: 23 °C ***

Once at 23 degrees you have the luxury of prolonged hypoxic periods without appreciable neuronal apoptosis.

*** 23 degrees is the optimal temperature to limit traumatic brain injury & maximise survival in Baltic sturgeon experimental models. Ref: *Scand Journ of Aquat Vet Sci., May* 1964 3:123. pg 42 - 43.

DELUXE Options

The Deluxe DOG(MA) Collar includes an inbuilt, combination pill dispenser and motion alarm sensor. The "Motion Maraca".

The lateral compartments can be filled with custom designed Tic-Tac Tamiflu tablets.

These can be immediately dispensed to any patient or staff member who sneezes, coughs or gives a history of recent air travel whilst in the ED. Advanced pharmacological technology means that the Tic-Tac Tamiflu tablets can be delivered by any route - nasal, aural, oral, transurethral or rectal.

NB: ATLS 1997 suggests that the transurethral route is contraindicated in the patient with suspected pelvic fractures or feelings.

Of course in most instances it is easiest to insert 3 Tic-Tacs PR at the conclusion of the **routine** rectal examination.

The revolutionary Tic-Tac dispenser design doubles as a motion sensor. Should the patient manage to overcome the adhesive fixation to the spine board.

The gentle shaking of Maracas will raise the alarm and allow the nurse assigned to the patient to come running from wherever they might be within the department.

Henceforth more sedating medication can be administered in a timely fashion to facilitate absolute motionlessness.

Manufacturers note:

The **BARF GUARD**TM which was featured on earlier prototype designs is no longer available.

[A retrospective survey of 3 centres where this model was trialled showed that the rate of vomiting whilst wearing the DOG(MA) Collar was 0.00%. In a consensus statement from the expert panel at the 7 week DOG(MA) Congress in the Bahamas concluded that this module was an unnecessary and expensive addition to an already excellent design.]

ONE DOCTOR RESUSCITATION

Here at Parker Bros. Labs we understand the pressures faced by hard-working ED physicians. SO that is why we have gone into partnership with the LUCAS folk to deliver a truly automated CPR system.

With the DOG(MA) Collar and the LUCAS## compression system it is easy for a single doctor to carry out a masterful resuscitation - with ZERO breaks to continuous chest compressions and cricoid pressure.

Imagine a future where the sickest patients are dealt with by a single doctor. No annoying team dynamics, no recalcitrant Anaesthetists - just you and your machines.

This set up allows you to manage resuscitation singlehanded - and free up your team to clear the waiting room and spend more time following their Twitter feed.

##: Note-the LUCAS compression system has not been shown to be superior to manual cardiac compression in randomised, placebocontrolled clinical trials. As such it is a potentially dangerous device and should only be used in the context of ongoing clinical trials. Nor should manual compression for that matter.

We take no responsibility for any injury resulting from the combination of these devices.