ZOLL

IVTM™ Intravascular Temperature Management

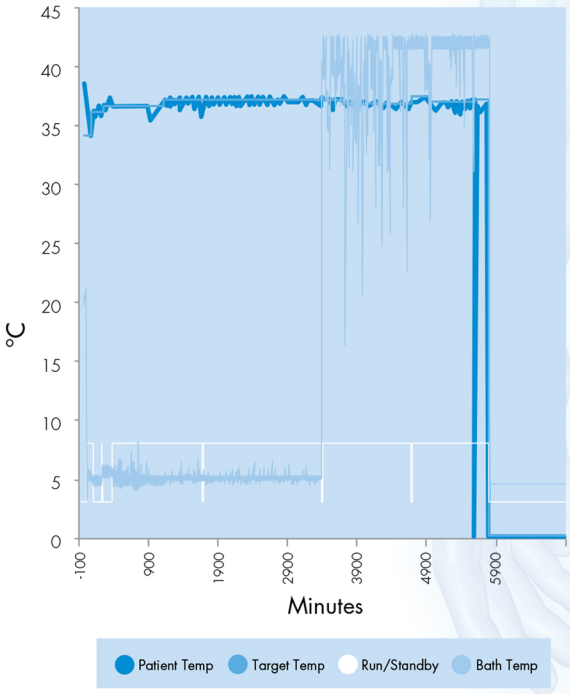
DELTA

Case Study into Clinical Advantage of IVTM Fever Management using TGXP over Surface Cooling with Covid19 Patient

HOSPITAL SIZE
348 beds

PATIENT HISTORY	
Age	67
Weight	94kg / 207lbs
Gender	Male
RR	30's
O_2 Sat	80%
Peep	12
FiO_2	60%

Figure 1: IVTM Patient Data



FEVER MANAGEMENT CONSIDERATIONS FOR COVID-19 PATIENTS	
ZOLL Temperature Management System Utilized	Thermogard XP® (TGXP)
ZOLL IVTM Catheter Utilized	Quattro® Catheter
Starting Temperature	40.2°C (104.5°F)
Target Temperature	36.5°C (97.7°F)
Time to Target Temperature	**<60 minutes (See Figure 1)**

IVTM Performance Summary

Patient presented with high fever and respiratory distress syndrome related to COVID-19. Poor fever control is associated with increased mortality in COVID-19 patients.[1]

Surface cooling was initiated with no change in patient's temperature and continued deterioration in the patient's overall condition.

While preparing to prone the patient a Quattro® catheter was placed. Patient's hemodynamics stabilized once the **fever was controlled and reduced to 36.5°C – eliminating the need for proning.** Respiratory rate improved to 22, oxygen saturation to 97%, peep to 7, FiO2 to 30%.

Patient was cooled quickly and reached target temperature in less than an hour. IVTM is a precise and efficient way to control fever.[2]

IVTM System Thermogard XP®

Track patient & system data, transferring digitally to patients file post treatment.

Important data are clearly displayed on the large screen

Set upper and lower patient temperature alarm limits

Set the target temperature between 31°C and 38°C

Toggle between Standby and Run modes

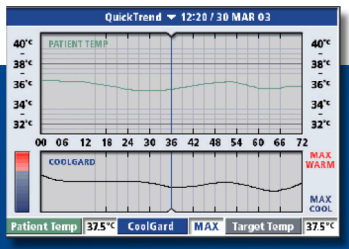
Visual alarm indicator

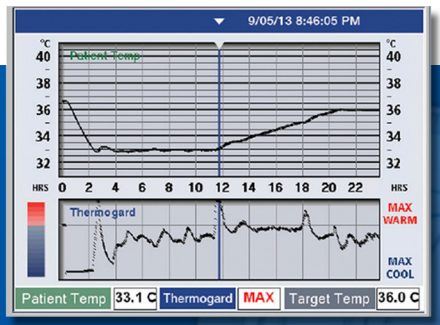
Clearly visible coolant temperature indicator

Control mode, target temperature, and rate setting all on one screen.

Choose a cooling/ warming rate

Precise, fast and effective control of patient temperature, reducing clinical time & costs while achieving better results compared to surface cooling.[2-7]





Available from

DELTA

Call 01782 637009 for system details & ordering

[1]Tharakan, et al., *Critical Care*. 2020;24:298
[2]Hoedemaekers CW, et al. *Critical Care*. 2007;11:R91.
[3]Mayer SA, et al. *Critical Care Medicine*. 2004;(3)212:2508-2515.
[4]Diringer MN, et al. *Critical Care Medicine*. 2004;(32)2:559-564.
[5]Heard KJ, et al. *Resuscitation*. 2010;81:9-14.
[6]Horn CM, et al. *Journal of Neurointerventional Surgery*. 2014 Mar;6(2):91-95.
[7]Knapik P, et al. *Kardiologia Polska*. 2011;69(11):1157-1163.

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