BWH Anesthesia Monitoring – Outline
CA-1 Lecture July 21, 2010, James H Philip ME(E), MD, CCE

Pulse and Saturation, CO2, BP, ECG in all patients
Be prepared to monitor Temperature
Monitor Neuromuscular blockade when using muscle relaxants
Monitor Brain Function when specifically indicated
GE Solar and GE Dash - BWH Anesthesia Standard Monitors
Solar = large with Touch Screen and Pendant – Dash = small with Control Knob
Alarm Silence Button Pauses Alarms: 1=5min, 2=15min, 3=permanent, 4=on
Use New Case Setup for each case to set the monitor straight
  Resets everything to BWH Defaults (screens, alarms, everything)
  BWH Defaults are chosen by Anesthesia Clinical Practice Committee
  Things like
    70% for Default Alarm Volume
    Low SpO2 Alarm 90%
    Low FIO2 17%
Use Quick Keys for Graphic Trends, Tabular Trends, or Main Menu
  Tabular Trends show all values via Page Down
Use screen and buttons
  Select 3 patient parameters for graphic trends
  HR, NIBP, SPO2 are the only useful pre-set set
  All other sets must be hand-chosen
Set pulse oximeter averaging time to 2 seconds rather than default 8 sec which is slow
NIBP or NBP = Noninvasive Blood Pressure
  Go/Stop is a bad button except to stop a measurement. Go measures once only
  Use Auto and set desired interval (1, 2.5 minutes, typ)
  STAT measures NIBP every 20 seconds for 5 minutes and reverts to Auto
  96 NIBP values are saved. After that the old ones are thrown away
ECG - Connect 5 lead wires in reasonable locations
  Leave ECG Filter = Moderate or better to visualize ST segments.
  ECG Analysis always uses the better Diagnostic Filter
  Leads Disconnect means Right Leg (Green) is disconnected, usually
To monitor Des, Choose Gas and change Iso to Des. Sevo measures by itself
Beware that GE uses Sevo MAC = 1.7 % rather than the accepted 2.1%
6 minute trend is great for gases but does not work for NIBP
All Solar, Dash (and Anes Machine) data goes to Network->Server->PIMS and is saved

When using a Nerve Stimulator assure the measured delivered current is ≥ 50 mA

Users Manuals are on Intranet. Navigate as follows
www.bwhanesthesia.org / Education / Anesthesia Technology, or directly at:
http://general.bwh.harvard.edu/intranet/GroupWorkspaces/techmatters/public