Set Includes

E

A

F

B

C

G

H

I

A. 1 cardiology model unit
B. 1 controller-table
C. 1 set of speaker system ⎤ built in controller-table
D. 1 set of PC/keyboard/mouse ⎦
E. 1 LCD monitor
F. 1 control PC
G. 4 textbooks
H. 1 rib sheet
I. 1 cover
J. instruction manual

Specifications

Size：W140×D75×H170 (cm)
　　　55.1×29.5×66.9 (in)
Power consumption：approx. 400W

Cardiology Patient Simulator "K" ver.2

MW10　11389-000
Production Supervision：Japanese Educational Clinical Cardiology Society

The patient is suspected to have cardiovascular disorder.
You have at hand a stethoscope and ECG data.
What will you do?

Simulator "K" is used :

· **OSCE in Korea**
· **The Japanese Society of Internal Medicine in Japan**

**Presentación del simulador
Paciente cardiológico "K"
in Spain**

Octover, 2006
in FICOMEM (La Fundación del Ilustre
Colegio de Médicos de Madrid) para la
Educación y Formación Sanitaria,
Madrid
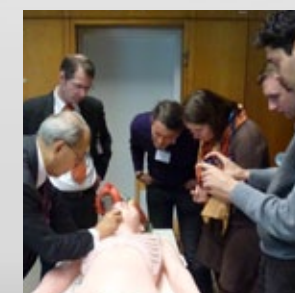
**Mr.K Symposium
in Germany**

Japanese-German Meeting on
Cardiology Simulation in Medical
Education
November, 2011
in LernKlinik,
Leipzig University

Publication Referances

Development
Tsunekazu Takashina, Masashi Shimizu, Hidenobu Katayama
" A New Cardiology Patient Simulator "
Cardiology 1997;88;408-413

Undergraduate medicine
Hiroyuki Komatsu, Yasuji Arimura, Takuroh Imamura, Kazuo Kitamura, Akiko Okayama Katsuhiro Hayashi
" Training in physical examination using a cardiac patient simulator for medical students during bed side learning."
Medical education 42(2), 55-63, 2011-04-25

Postgraduate medicine
Tsunekazu Takashina
" The Postgraduate Education of Basic Clinical Skills and Patient Management "
ACC-JCS Joint Symposium: Postgraduate Cardiology Education: A Comparison of the US and Japan,
The 68th Annual Scientific Meeting of the Japanese Circulation Society (2004)

Postgraduate medicine
Kanji Iga, Hiroyuki Tomatsu, Hiroyasu Ishimaru
" Effect of Repeated Training in Physical Examination with a New Cardiology Simulator for 1st-year Medical Residents Shortly after Receiving Medical Licenses "
Medical Education 2001; 32(2) : 107-111

Nurse Students
Tomoko Ito, Yoshihiro Asanuma, Shoko Inomata
" Evaluation of teaching cardiological examination skills to student nurses with the simulator –Using "Ichiro", the new cardiology patient simulator "
The Journal of Japan Society for Health Care Management Vol. 4 (2003-2004) No. 3 P 406-411

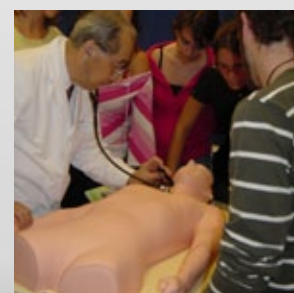2015/8/28

Hone your senses and skills
for bedside cardiology!!

Observation　Auscultation　Palpation

KYOTO KAGAKU

Spesifications are subject to change.

Basic Skills Training

Before Auscultation

A stethoscope is a great tool; however, do not yet jump to it. Using your eyes and fingers in organized sequences, you can gather a lot of information about the patient.
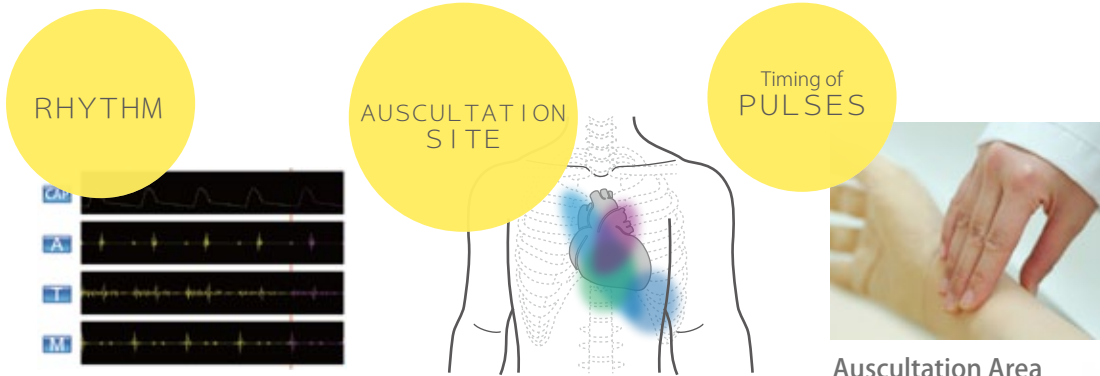
Auscultation

Observation   Palpation

1
S1, S2, S3 and S4
How S1 and S2 can be differentiated?

RHYTHM

AUSCULTATION SITE

Timing of PULSES

2
Respiration
Respiratory cycle is represented to understand respiratory related phenomena.
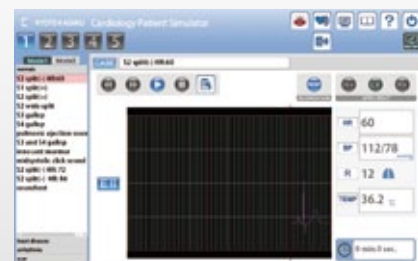
3
Murmurs
Is it systolic or dystonic ?
Once a heart murmur is heard, then you are to determine if it is systolic or diastolic.
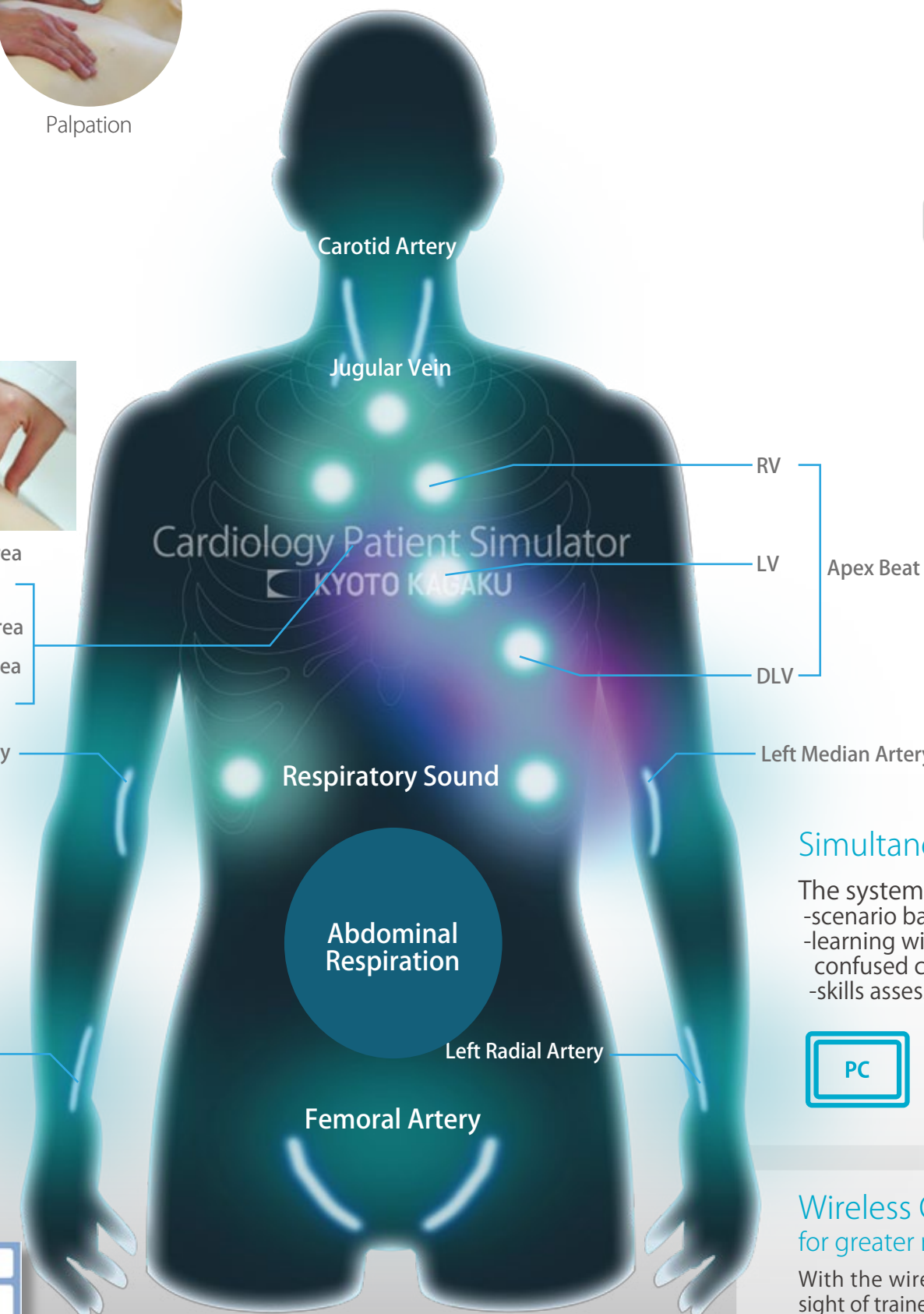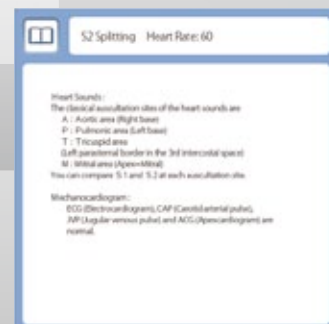
4
Arrhythmia
What can be learned by ECG and heart sounds ?
Wide variety of arrhythmia with real-time dynamic ECG chart.

Ensure the skills and integrate findings

Real-time dynamic chart confirms what you are listening or feeling.
Explanation windows facilitate self-learning and repeated training.

S2 Splitting Heart Rate: 60

Cardiology Patient Simulator
KYOTO KAGAKU

Carotid Artery

Jugular Vein

Auscultation Area
A Aortic Area
P Pulmonic Area
T Tricuspid Area
M Mitral Area

Right Median Artery

Respiratory Sound

Abdominal Respiration

Right Radial Artery

Femoral Artery

RV
LV   Apex Beat
DLV

Left Median Artery

Left Radial Artery

OSCE / Skills Assessment

Objective and standardized finding of simulator "K" provides an incomparable tool for OSCE session.
The monitor display can be arranged to provide just enough information for examinees.

Playlist Maker

Scenario Based Training Session

Play List Maker

Simulator "K" is not just for individual task trainings. Incorporated "**Play List Maker**" facilitates creating and conducting scenario based training sessions which feature change in findings over time.

● Playlist Maker facilitate :
-sessions with accompany temporal change in physical findings.
-standardizing training contents among different instructors.
-saving time of preparation.

Simultaneous Control of Up to Five Units

The system realize:
-scenario based training that involves more than one patients.
-learning with comparison between related or easy to be confused case examples
-skills assessment sessions with different cardiovascular stations.

PC

1   2   3   4   5
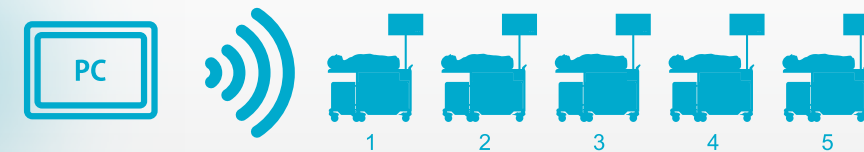
Wireless Control
for greater reality and interactive sessions

With the wireless tablet control, the instructor can be out of sight of trainees who work in real-life setting. At the same time, the tablet allows instructors to respond to trainee's action or lack of action, by changing the case settings on the spot.

F E A T U R E S

● True-to-life reproduction of heart and breathing sounds recorded from real patients.
● Anatomically correct auscultation-palpation sites on the life-sized manikin
  -5 basic sites for heart sounds auscultation
  -8 sites for arterial pulse palpation
  -2 sites for jugular vein line observation
  -3 sites for apex beat palpation
  -3 sites for breathing sounds auscultation
  -area for abdominal respiration observation
● 36 cases of total patient simulation
  - 12 cases of normal heart sounds
  - 14 cases of heart disease simulations
  - 10 cases of arrhythmia simulations
● An actual stethoscope can be used
● Auscultation sites corresponding to heart valves are located on a life-size body
● 52 cases of arrythmia / ECG simulation
● Wireless remote control
● Multiple operation (maximum 5 units)
● Playlist maker
● Error indication system
● Touch screen remote control

Error Indication System
Confirming now Pulse

S K I L L S

● Use of stethoscope
● Perform bedside cardiovascular examination in organized sequence (observation, palpation and auscultation)
● Assess jugular vein pulses
● Identify different components of normal heart sounds (S1, S2, S3, S4 and OS)
● Assess heart sounds
● Assess murmurs
● Interpretation of ECG

Use your own stethoscope.

C A S E S

Mode 1 : Comprehensive patient simulation with sounds, pulses, apex beats and ECG

No.	Normal heart simulation (12 cases)	No.	Heart disease simulation (14 cases)	No.	Arrhythmia (10 cases)
A-01	S2 split (-) HR: 60	B-01	aortic stenosis	C-01	sinus arrhythmia
A-02	S1 split (+)	B-02	mitral regurgitation	C-02	sinus tachycardia
A-03	S2 split (+)	B-03	mitral stenosis	C-03	sinus bradycardia
A-04	S2 wide split	B-04	aortic regurgitation	C-04	ventricular premature contraction (1)
A-05	S3 gallop	B-05	hypertrophic cardiomyopathy	C-05	ventricular premature contraction (2)
A-06	S4 gallop	B-06	mitral steno-regurgitation	C-06	ventricular premature contraction (3)
A-07	pulmonic ejection sound	B-07	pulmonic valvular stenosis	C-07	sino-atrial block
A-08	S3 and S4 gallop	B-08	atrial septal defect	C-08	atrio-ventricular block
A-09	innocent murmur	B-09	ventricular septal defect	C-09	atrial fibrillation
A-10	midsystolic click sound	B-10	tricuspid regurgitation	C-10	atrial flutter
A-11	S2 split (-) HR: 72	B-11	acute mitral regurgitation		
A-12	S2 split (-) HR: 84	B-12	patent ductus arteriosus		
		B-13	mitral valvular prolapse		
		B-14	dilated cardiomyopathy		

Mode 2 : Arrhythmia simulation, auscultation training with ECG

A		B		C		D	
A-01	normal sinus R	B-01	atrial flutter	C-01	VVI pacemaker	D-01	vpc (quadrigeminy)
A-02	sinus tachycardia	B-02	av block	C-02	atrial pacemaker	D-02	vpc (trigeminy)
A-03	sinus arrhythmia	B-03	av block & crbbb	C-03	vent pacemaker	D-03	vpc (bigeminy)
A-04	apc solitary	B-04	av block (digital)	C-04	av seq pacemaker	D-04	vpc (couplet)
A-05	apc bigeminy	B-05	av block (mobitz)	C-05	icrbbb	D-05	pvc (repetitive)
A-06	ectopic pacemaker	B-06	av block (mobitz)	C-06	crbbb	D-06	pvc (R-on-T type)
A-07	wondering pacemaker	B-07	av block (3:1&4:1)	C-07	clbbb	D-07	non-sustained VT
A-08	coronary sinus R	B-08	av & crbbb	C-08	clbbb	D-08	vent tachycardia
A-09	sinus bradycardia	B-09	paroxy atr tachy	C-09	clbbb (by ami)	D-09	vent flutter
A-10	ss syndrome	B-10	av junc R (svst)	C-10	wpw syndrome	D-10	vent fibrillation
A-11	atrial fibrillation	B-11	av junc R (pat)	C-11	wpw syndrome	D-11	vent R (sinus cond)
A-12	atrial flutter	B-12	av junc R	C-12	wpw syndrome	D-12	accel vent rhythm
A-13	atrial flutter fib	B-13	av junc contraction	C-13	vpc (solitary)	D-13	agonal rhythm