

RIGHT SIDED, PEDIATRIC ELECTROCARDIOGRAM

2.1.2.11.12

Purpose and or Principle: Newborn hearts do not have the left side orientation of the adult heart. Pediatricians may request a right sided ECG.

Right sided ECGs will be performed on patients 2 years old and under if the physician/pediatrician orders it. Otherwise regular ECGs will be done on patients of >2years of age.

Equipment Quinton Eclipse Electrocardiograph

Disposable Resting EKG Electrodes - cut in half through the tab

Step	Action
1	In a private location, make the patient comfortable on a chair or bed large enough to support their arms and legs. Arms should rest at sides and legs should lie flat, not touching one another. Use a pillow to support the patient's head. A relaxed patient is the key to a good quality ECG.
2	Turn on the Eclipse cart by pressing the on/standby button, upper right corner. Wait for the reliability checks.
3	Download the requisition. Verify the patient's identification from this screen. Enter your initials in the tech field. Include under the comment section " Right side V4 placement. "
3a	To manually enter demographics press the I , to go to the Edit Id screen. <ul style="list-style-type: none"> a. If a System Note box appears with the message "New Patient?" press Y. b. V4 Placement: STANDARD c. Location: select appropriate department d. Encounter #: is entered as the patient's visit ID or billing #. e. Last name: f. First name: should be entered followed by a space and then middle initial. g. Room #: if appropriate h. DOB: format is month-date-four digit year. You may use spaces, periods or hyphens to separate. i. Age: this fills in if you have entered the DOB j. Sex: select appropriate choice k. MD: should be entered as the family physician, not an ED doctor. l. Tech: your initials m. Comments: "Right side V4 placement." Also include any report communication fax/mail details.
3b	STAT ECGs without any demographics are like unlabeled specimens and will be canceled. If demographics become available later, leave a detailed memo and communicate to the RMC lab ECG tech.
4	Limb lead placement can be somewhat arbitrary, but should be on the fleshy parts of the upper arms and calves, refer to diagram. (If limb lead placement varies from the norm due to the patient's anatomy or for other reasons, it should be noted on the ECG so that it can be factored into the interpretation.)
5	Chest lead placement must be precise. Refer to the diagram. Intercostal space refers to rib spaces, do not include the space between the clavicle and the first rib. Keep V1 and V2 close to the sternum. <ul style="list-style-type: none"> a. V1 is the fourth intercostal space, on the right border of the sternum. b. V2 is the fourth intercostal space, on the left margin of the sternum.

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	<p>c. V3 is located on the fifth rib and slightly to the right of V2.</p> <p>d. V4 is in the fifth intercostal space on the right side, down from the midclavicular line.</p> <p>e. V5 is at the horizontal level of V4 at the left anterior axillary (just before the arm pit) line.</p> <p>f. V6 is at the horizontal level of V4 and V5 at the left mid axillary line (center of the arm pit).</p>
6	Lead cables should be positioned to follow patient contours and lay flat, avoid large loops.
7	Press the ECG button to start the tracing.
8	Check the quality of the tracing, looking for a level baseline and background interference.
9	Print the ECG.
10	Remove electrodes and redress/cover the patient.
11	Wash hands before leaving the room.
12	Leave the tracings at the nurse's station.
13	Download the ECG into the Pyramis storage system.
14	Pediatric EKG's are sent to Minneapolis Children's Heart Institute for over reading. Call the RMC Lab, 952-442-2191, Ext. 5600, to initiate this process.
15	Eclipse carts should be plugged in when not in use.

Procedural Notes The Eclipse carts require battery recharging. Every 24 hours, one of the carts is taken out of use and allowed to recharge for 24, uninterrupted, hours.

Attachments "Resting ECG Lead Placement & Coding Chart", from the Eclipse Operating Manual
 "Alternative Method for Locating Correct Precordial Positions", from the Burdick Guide ECG Cart Cleaning & Maintenance Chart.

Related Documents/ Backup Procedure RMC maintains three ECG carts, try another cart.

References Burdick Eclipse Electrocardiograph Operating Instructions, directive of Mpls. Children's Heart Inst.

Date:	Author:	Date:	Validated by:	Date:	Approved by:
10-24-07	PK				
\\Rmcfs01\Department\LAB_Leadfolder\Phlebotomy EKG\2.1.2.07.08 Right Sided, Pediatric Electrocardiogram.doc					
Annual Review					
Date:	4/09	1/31/12			
Initials:	PK	PK			
Date:	Initials:	Revision and Reason			
2-4-08	Pk	Pyramis Direct Fax Update			
10/2011	PK	ECGs for Pediatric patients in ED/TTMC			
2/20/12	PK	Added reporting details to comment entry instructions.			

Discontinued

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