Telemedicine Clinic
Rattanakiri
Referral Hospital
September 2009

Report and photos compiled by Rithy Chau and Sovann Peng, SHCH Telemedicine

On Tuesday September 29 and Wednesday September 30, 2009, Rattanakiri Referral Hospital (RRH) staffs began their TM clinic. Patients 3 new cases and 1 follow up case were examined, and the data were transcribed along with digital pictures of the patients, then transmitted and received replies from their TM partners in Boston and Phnom Penh.

The following day, Thursday October 1, 2009, the TM clinic opened again to receive the same patients and other follow-up patients for further evaluation, treatment and management. Finally, the data for treatment and management would then be transcribed and transmitted to Nurse Peng Sovann at SHCH who compiled and sent for website publishing.

The followings detail e-mails and replies to the medical inquiries communicated between TM clinic at RRH and their TM partners in Phnom Penh and Boston:

From: Hospital Rattanakiri Referral
Date: Sep 23, 2009 4:52 PM
Subject: September TM clinic at Rattanakiri Referral Hospital
To: Chau Rithy; Kruy Lim; "Paul J. M.D. Heinzelmann"; Joseph Kvedar; "Kathleen M. Kelleher"; Brian Hammond; Cornelia Haener
Cc: Bernie Krisher; Bernie Krisher; Ed & Laurie Bachrach; Noun SoThero

Dear All,
Please be informed that the next TM clinic at Rattanakiri Referral Hospital will be held on Wednesday, September 30, 2009 beginning at 8:00am local time for one full day. We expect to enter and transmit the patient data to those of you at SHCH and at Partner in Boston that evening.

Please try to respond before noontime the following day, Thursday, October 01, 2009.The patients will be asked to return to the hospital that afternoon on Thursday to receive treatment along with a follow up plan or referral.

Thank you very much for your cooperation and service.
Best regards,

Channarith Ly

From: Kiri Hospital Telemedicine
Date: Sep 30, 2009 3:35 PM
Subject: Rattanakiri Telemedicine Clinic September 2009
To: rithychau@sihosp.org, Paul Heinzelmann; corneliahaener@sihosp.org, jkvedar@partners.org, kfiamma@partners.org, kruylim@yahoo.com
Cc: bernie@media.mit.edu; "Lauriebachrach@Yahoo. Com"; thero@cambodiadaily.com

Dear all,

There are 3 new cases and 1 follow up for this month Clinic. This is case number 1 PV#00322, 39F and photos.

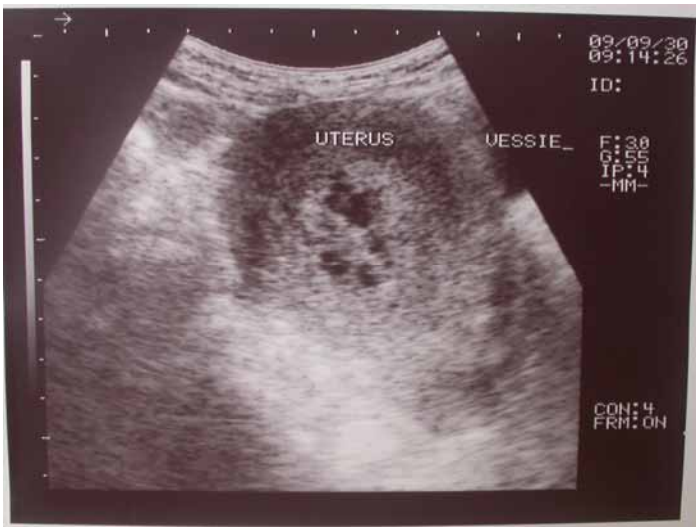
Best regards,
Polo/Sovann

Rattanakiri Provincial Hospital Telemedicine Clinic
with
Sihanouk Hospital Center of HOPE and Partners in Telemedicine

Patient: PV#00322, 39F (Village VI)

Chief Complaint: Vaginal bleeding x 2 months

HPI: 39F, housewife, presented with symptoms of left side breast tenderness, then the tenderness present to the right breast. After a few days, she has vaginal bleeding with suprapubic pain. She thought it was her menstruation but it continue until now and she had pregnancy test with negative result. The bleeding character is as her normal menstruation. She bought medicine from local pharmacy (unknown name antibiotic) for 3 days then went to consult with doctor in Phnom Penh and was treated with two kinds medicine (unknown name) taking 1t po qd. She has normal appetite, bowel movement, urination, and denied of heavy bleeding, vaginal discharge, trauma, taking hormonal contraceptive, or sexual contact since this bleeding.



PMH/SH: no surgery

Social Hx: Casually alcohol drinking; chain cig smoking stopped 7y ago, 7 children

Family Hx: None

Medication: Two kinds of medicine 1t po qd

Allergies: NKDA

ROS: no fever, no cough, no chest pain, no palpitation, no weight loss

PE:
Vital Signs: BP: 105/72 P: 74 R: 20 T: 37^{o}C Wt: 39kg

General: Look stable

HEEN: No oropharyngeal lesion, pink conjunctiva, no lymph node palpable, no neck mass

Chest: CTA bilaterally, no rales, no rhonchi; H RRR, no murmur

Abdomen: Soft, no tender, no distension, (+) BS, no HSM, a small mass palpable about 2x3cm?, smooth, mobile on left flank

Extremity/Skin: No edema, no lesion

Pelvic exam: Normal female genitalia, no lesion or dysplasia on labia and cervix, dark blood clot at cervix entrance, no erythema, no mucus or pus discharge; bimanual exam, uterine normal in size, no tenderness, but slightly firm, no adnexial tenderness

Rectal Exam: Good tone, no mass, no gross blood

MS/Neuro: MS+5/5, motor and sensory intact, DTRs+2/4

Lab/Studies:

Abdominal U/S conclusion: Molar pregnancy? Done 2009/09/30
Pregnancy test negative done 2009/09/30
PAP Smear done 2009/09/30

Assessment:

1. Molar pregnancy?

Plan:

1. Send specimen for pap smear at SHCH
2. D & C at Rattanakiri referral hospital
3. Ibuprofen 400mg 1t po bid prn pain

Labs available locally: Hemoglobin, UA, Glucose, Stool Occult Blood, and Pregnancy Test

Specific Comments/Questions for Consultants: Do you agree with my assessment and plan?

Examined by: Nurse Sovann Peng **Date: September 29, 2009**

Please send all replies to kirihospital@gmail.com and cc: to rithychau@sihosp.org

From: Cornelia Haener
Date: Sep 30, 2009 5:20 PM
Subject: RE: Rattanakiri Telemedicine Clinic September 2009
To: Kiri Hospital Telemedicine; rithychau@sihosp.org; Paul Heinzelmann; jkvedar@partners.org; kfiamma@partners.org; kruylim@yahoo.com
Cc: bernie@media.mit.edu; "Lauriebachrach@Yahoo. Com"; thero@cambodiadaily.com

Dear Polo and Sovann,

Thanks for submitting this case. I am not a gynecologist but I am wondering if a choriocarcinoma could be a possible differential diagnosis in this case. Thus, if a D&C is not, it would be important to send the specimen for histology workup.

Kind regards

Cornelia

From: Kiri Hospital Telemedicine
Date: Sep 30, 2009 3:42 PM
Subject: Rattanakiri Telemedicine Clinic September2009
To: Paul Heinzelmann; kruylim@yahoo.com; rithychau@sihosp.org; kfiamma@partners.org; jkvedar@partners.org
Cc: bernie@media.mit.edu; thero@cambodiadaily.com; "Lauriebachrach@Yahoo. Com"

Dear all,

This is case number 2, HK#00323, 66F and photos.

Best regard
Polo/ Sovann

Rattanakiri Provincial Hospital Telemedicine Clinic with Sihanouk Hospital Center of HOPE and Partners in Telemedicine

Patient: HK#00323, 66F (Village VI)

Chief Complaint: Pain on the buttock with radiation down to ankle x 1 month

HPI: 66F, presented with symptoms of left buttock with radiation down to the ankle and the pain usually started at night time, standing and walking for long times. She bought medication for pain but her condition seemed not better why she come to consult with Telemedicine. She has normal appetite, normal bowel movement, urination, no GI problem.

PMH/SH: Unremarkable

Social Hx: No alcohol drinking; no cig smoking

Family Hx: Her brother has HTN

Medication: None

Allergies: NKDA

ROS: Unremarkable

PE:
Vital Signs: BP: 135/93 P: 98 R: 22 T: 37°C Wt: 56kg

General: Look stable

HEEN: No oropharyngeal lesion, pink conjunctiva, no icterus

Chest: CTA bilaterally, no rales, no rhonchi; H RRR, no murmur

Abdomen: Soft, no distension, (+) BS, no HSM

Extremity/Skin: No edema, no lesion

MS/Neuro: MS+5/5, motor intact, sensory decreased on left thigh, DTRs+2/4

Lab/Studies:
Done on September 30, 2009

Calcium=8.5	[8.1 – 10.4]
Creat =1.0	[0.5 – 0.9]
Gluc =177.5	[75 - 115]
T. Chol=130	[<200]
TG =140	[40 - 140]
Uric Aci=5.8	[2.4 – 5.7]

Don on September 30, 2009

Gluc =171	[75 - 115]

Assessment:
1. Left sciatica
2. Hyperglycemia

Plan:
1. Ibuprofen 400mg 1t po bid x 1 month
2. Do regular exercise and warmth compression
3. Educate on diabetic diet, low fats/salt
4. Recheck Gluc in two weeks if still elevated, start her with diabetic drug
5. Draw blood for CBC, Lyte, BUN, Creat, Gluc and HbA1C at SHCH

Labs available locally: Hemoglobin, UA, Glucose, Stool Occult Blood, and Pregnancy Test

Specific Comments/Questions for Consultants: Do you agree with my assessment and plan?

Examined by: MA. Koh Polo **Date: September 29, 2009**

Please send all replies to kirihospital@gmail.com and cc: to rithychau@sihosp.org

No answer replied

From: Kiri Hospital Telemedicine
Date: Sep 30, 2009 3:48 PM
Subject: Rattanakiri Telemedicine clinic September 2009
To: Paul Heinzelmann; kfiamma@partners.org; kruylim@yahoo.com; corneliahaener@sihosp.org; rithychau@sihosp.org; jkvedar@partners.org
Cc: bernie@media.mit.edu; thero@cambodiadaily.com; "Lauriebachrach@Yahoo. Com"

Dear all,

This is case number 3, MT#00324, 53F and photos.

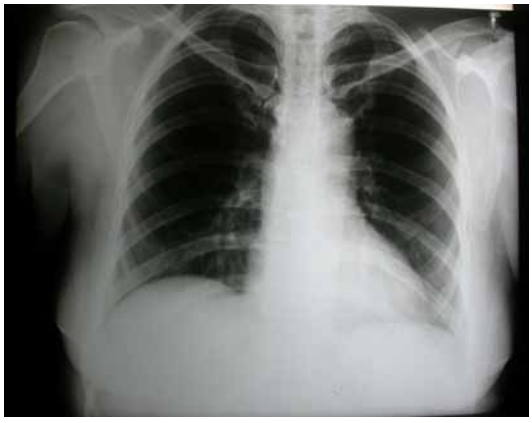
Best regards,
Polo/Sovann

Rattanakiri Provincial Hospital Telemedicine Clinic with Sihanouk Hospital Center of HOPE and Partners in Telemedicine

Patient: MT#00324, 53F (Village III)

Chief Complaint: Right shoulder pain x 6 months

HPI: 53F, presented with symptoms of sever right shoulder pain, especially with movement, better with massage in 2 to 3 minutes, and difficult to raise the right hand up, she bought medicine (unknown name) from local pharmacy but it seemed not better. In August she went to private clinic in Viet Nam, x-ray done and told she has spinal nerve compression and asked her to have surgery but she denied. On September 02, 2009, she went to a hospital in Phnom Penh and was treated with Mobic 7.5mg 1t qd, Tetrazepam 50mg 1/2t tid, Gabix 300mg 1t qPM, Esome 20mg 1t qPM and physiotherapy for about one week, She became less pain but the pain still present with movement. She denied of trauma.



PMH/SH: Remote malaria

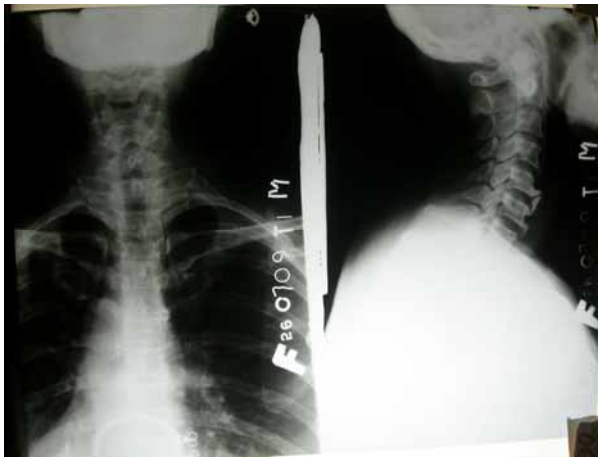
Social Hx: No cig smoking, drinking alcohol 30L/delivery, 7 children

Family Hx: Unremarkable

Medication:

1. Mobic 7.5mg 1t qd
2. Tetrazepam 50mg 1/2t tid
3. Gabix 300mg 1t qPM
4. Esome 20mg 1t qPM

Allergies: NKDA



ROS: Unremarkable

PE:
Vital Signs: BP: 120/83 P: 88 R: 20 T: 37°C
Wt: 70kg

General: Look stable

HEEN: No oropharyngeal lesion, pink conjunctiva, no neck mass, no lymph node palpable

Chest: CTA bilaterally, no rales, no rhonchi; H RRR, no murmur

Abdomen: Soft, no distension, (+) BS, no HSM, no surgical scar

MS/Neuro: All ROM full for UE bilaterally, slight radiating pain on right shoulder; no gross deformity, good radial pulse bilaterally, DTRs for UE normal

Lab/Studies:
Done on September 02, 2009

Gluc =133	[74 - 115]
T. Chol=154	[145 - 260]
TG =136	[45 - 165]
Calcium=8.8	[8.1 – 10.4]
Uric Aci=3.10	[2.40 – 7.00]

CXR and Spine x-ray attached

Assessment:
1. Cervical spine fusion (C3, C4)?
2. Cervical nerve compression?
3. Osteophyte vertebrae

Plan:
1. Ibuprofen 400mg 1t po bid x 1 month
2. Physiotherapy with exercise and worm compression

Labs available locally: Hemoglobin, UA, Glucose, Stool Occult Blood, and Pregnancy Test

Specific Comments/Questions for Consultants: Do you agree with my assessment and plan?

Examined by: Dentist Lath Sophanara **Date: September 29, 2009**

Please send all replies to kirihospital@gmail.com and cc: to rithychau@sihosp.org

From: **Cornelia Haener** <corneliahaener@sihosp.org>
Date: Sep 30, 2009 5:17 PM
Subject: RE: Rattanakiri Telemedicine clinic September 2009
To: Kiri Hospital Telemedicine <kirihospital@gmail.com>, Paul Heinzelmann <paul.heinzelmann@gmail.com>, kfiamma@partners.org, kruylim@yahoo.com, rithychau@sihosp.org, jkvedar@partners.org
Cc: bernie@media.mit.edu, thero@cambodiadaily.com, "Lauriebachrach@Yahoo. Com" <lauriebachrach@yahoo.com>

Dear Polo and Sovann,

Thanks for submitting this case.
The patient certainly has osteophytes of C5 to C7, but those might not be responsible for the problem. You have to think about degenerative changes of the rotator cuff. You write that she has pain in her right shoulder and cannot lift up her right arm. What is the range of motion of her right shoulder? How far can she abduct the right arm? When does the scapula start to rotate when she abducts her arm? Can she touch the back of her neck with her right hand and/or bring her right hand to the middle of the lumbar back easily?
In which part of her arm or hand is the pain radiating? Any numbness or paresthesia?

Kind regards
Cornelia

From: **Kiri Hospital Telemedicine** <kirihospital@gmail.com>
Date: Oct 1, 2009 9:40 AM
Subject: RE: Rattanakiri Telemedicine clinic September 2009
To: Cornelia Haener <corneliahaener@sihosp.org>, Paul Heinzelmann <paul.heinzelmann@gmail.com>, kfiamma@partners.org, kruylim@yahoo.com, rithychau@sihosp.org, jkvedar@partners.org
Cc: bernie@media.mit.edu, thero@cambodiadaily.com, "Lauriebachrach@Yahoo. Com" <lauriebachrach@yahoo.com>
Dear Dr. Cornelia,

She only had severe pain in the previous time but after she got treatment with medication and physiotherapy from Phnom Penh, she became less pain for now. She can touch the back of her neck with her right hand.
And this is her MS/Neuro exam:

MS/Neuro: All ROM full for UE bilaterally, slight radiating pain on right shoulder; no gross deformity, good radial pulse bilaterally, DTRs for UE normal; Right shoulder no crepitus, no erythema, no swelling.

Best regards,
Polo/Sovann

From: **Cornelia Haener** <corneliahaener@sihosp.org>
Date: Oct 2, 2009 9:48 AM
Subject: RE: Rattanakiri Telemedicine clinic September 2009
To: Kiri Hospital Telemedicine <kirihospital@gmail.com>, Paul Heinzelmann <paul.heinzelmann@gmail.com>, kfiamma@partners.org, kruylim@yahoo.com, rithychau@sihosp.org, jkvedar@partners.org

Cc: bernie@media.mit.edu, thero@cambodiadaily.com, "Lauriebachrach@Yahoo. Com" <lauriebachrach@yahoo.com>

Dear Polo and Sovann,

Thank you so much for this additional information. It sounds like a rotator cuff problem of the right shoulder, and I would suggest that she continues physiotherapy.

Kind regards
Cornelia
From: Perlmutter, Gary S., M.D.
Sent: Thursday, October 08, 2009 4:56 PM
To: Fiamma, Kathleen M.
Subject: RE: Rattanakiri Telemedicine clinic September 2009

Hi Kathy, My Pleasure. Based on the info below it seems this patient most likely has a rotator cuff tear or severe rotator cuff tendonitis. I am not convinced it is her neck although the physical exam would be very helpful. In any case I recommend proceeding with a shoulder MRI to evaluate the integrity of the rotator cuff. If an MRI is performed I would be happy to review it. Best of luck to the patient.

Gary Perlmutter M.D.
Harvard Shoulder Service

From: Kiri Hospital Telemedicine
Date: Sep 30, 2009 3:57 PM
Subject: Rattanakiri Telemedicine Clinic September 2009
To: Paul Heinzelmann; kruylim@yahoo.com; rithychau@sihosp.org; jkvedar@partners.org; kfiamma@partners.org
Cc: bernie@media.mit.edu; thero@cambodiadaily.com; "Lauriebachrach@Yahoo. Com"

Dear all,

This is last case for Rattanakiri Telemedicine Clinic September 2009, NH#00010, 55F and photos.

Thank you very much for your cooperation and support in this project.

Best regards,
Polo/Sovann

Rattanakiri Provincial Hospital Telemedicine Clinic with Sihanouk Hospital Center of HOPE and Partners in Telemedicine

Patient: NH#00010, 55F (Village III)

Subject: 55F was diagnosed with HTN, DMII, VHD?? With uncontrolled blood pressure, SBP around 160 to 200 for about 1y, come for follow up and presented with HA, neck tension, chest tighness on/off. On September 11, 2009, she went to Calmette hospital for 2D echo with result of Aortic Insufficiency, Mitral Insufficiency but she didn't get treatment from there. She has normal bowel movement, normal urination, and denied of dizziness, diaphoresis, orthopnea, edema, GI problem.

Medication:

1. Atenolol 50mg 1t po bid
2. Chlorpropramide 1t po bid
3. ASA 300mg 1/4t po qd
4. HCTZ 50mg 1t po qd

Allergies: NKDA

Object:
Vital Signs: BP: 178/86 (both sides) P: 68 R: 20 T: 37^{o}C Wt: 55Kg

General: Look stable

HEENT: No oropharyngeal lesion, pink conjunctiva, no neck mass, no JVD

Chest: CTA bilaterally, no rales, no rhonchi, H RRR, 2+crescendo systolic murmur, loudest at pulmonic area

Abd: Soft, no tender, no distension, (+) BS, no HSM

Extremity: No edema, no lesion

MS/Neuro: MS +5/5, motor and sensory intact, DTRs +2/4

Previous Lab/Studies:

Lab result on July 24, 2009

Gluc =11.5 [4.2 - 6.4]
HbA1C=7.5 [4 - 6]

Done on September 11, 2009

2D echo conclusion: Aortic insufficiency, Mitral insufficiency with EF 71%

Today on September 29, 2009

FBS: 223mg/dl

EKG attached

Assessment:

1. HTN
2. DMII
3. VHD (AI/MR)

Plan:

1. Atenolol 50mg 1t po bid
2. Chlorpropramide 1t po bid
3. ASA 300mg 1/4t po qd
4. HCTZ 50mg 1t po qd
5. Captopril 25mg 1/2t po bid

Centre de Cardiologie de Phnom Penh

Laboratoire d'échocardiographie
et d'écho-doppler vasculaire

COMPTE - RENDU D'ECHOGRAPHIE CARDIAQUE

Examen n° : 21-10 N° cassette : Position film :

Effectué le : 11.09.09 par Dr. : **Dr. HAK SOK HAY**
Médecin Cardiologue

Motif de l' examen :

Nom : Norng
Prénom : Kuch
Date de naissance : 1954 Age : 55A Sexe : F

Poids : Taille : Surface corporelle :

Conditions techniques :

Remarques cliniques pendent l'examen :

VD - VALVES TRIC ET PULM - PRESSIONS DE REMPLISSAGE - VCI ET VSH :

Anneau tric :.....mm Grade IT :...../4 PAPs :.....mmHg
DJ vc=.....mm PAPm :.....mmHg
SOR =.....cm² PAPd :.....mmHg
VR =.....ml/s

Anneau pul :.....(N=.....) APT =.....(N=.....) APD =.....(N=.....) APG =.....(N=.....)

Vel max pul :.....m/s(0.6-0.9) ΔPpul max/moy :...../.....

- VD non dilaté
- Pas de VP

PERICARDE:

sec

CONCLUSION :

- VA centrale 9/4
- VD 9,5/4
- VG non dilaté
- fonction VG bonne (FE = 71%)

VD DTD (mm)		
Ao ascend (mm)	32	
OG (mm et cm²)	29	
SIVD-S (mm)	10	
VGDTD-DTS (mm)	48	29
PP VGD-S (mm)	9	
FRVG - FEVG %	40	71
Qp/QS		

Situs : Solitus ☑ Inversus ☐

Retours veineux : Normaux ☑ Anormaux ☐

Connexion auriculo-ventriculaire : Normale ☑ Anormale ☐

Connexion ventriculo-artérielle : Normale ☑ Anormale ☐

Crosse - Coronaires - Canal artériel - Collatéralles :
CA fermé ☑ persistant d ____ mm Direction shunt ____ ΔPsyst: ____ mmHg
ΔPdiast: ____ mmHg

SIA - OREILLETTES :
SIA intact ☑ CIA ☐ ____ d ____ mm Direction shunt ____ Δ pmax: ____ mmHg

- oreillettes - non dilatées

SIV - VG - FONCTION VG :
SIV intact ☑ CIV ☐ ____ d ____ mm Direction shunt ____ ΔPsyst: ____ mmHg

- Normokinésie des parois VG
- Trouble de relaxation VG

VALVE MITRALE:

Anneau : ____ mm Anneau/GVM = ____
Vel max: ____ m/s *(0,6-1,3)* E/A : ____ / ____ ΔP_{moy}: ____ mmHg
IM ____ /4 S relative= ____ % MM ☐ RM ☐ Plan = ____
DJvc = ____ mm PHT = ____
SOR = ____ cm² EdC = ____
VR = ____ ml/bat PISA= ____

ETIOLOGIE :

MECANISME / ANALYSES LESIONNELLES:

IM 0,5/4

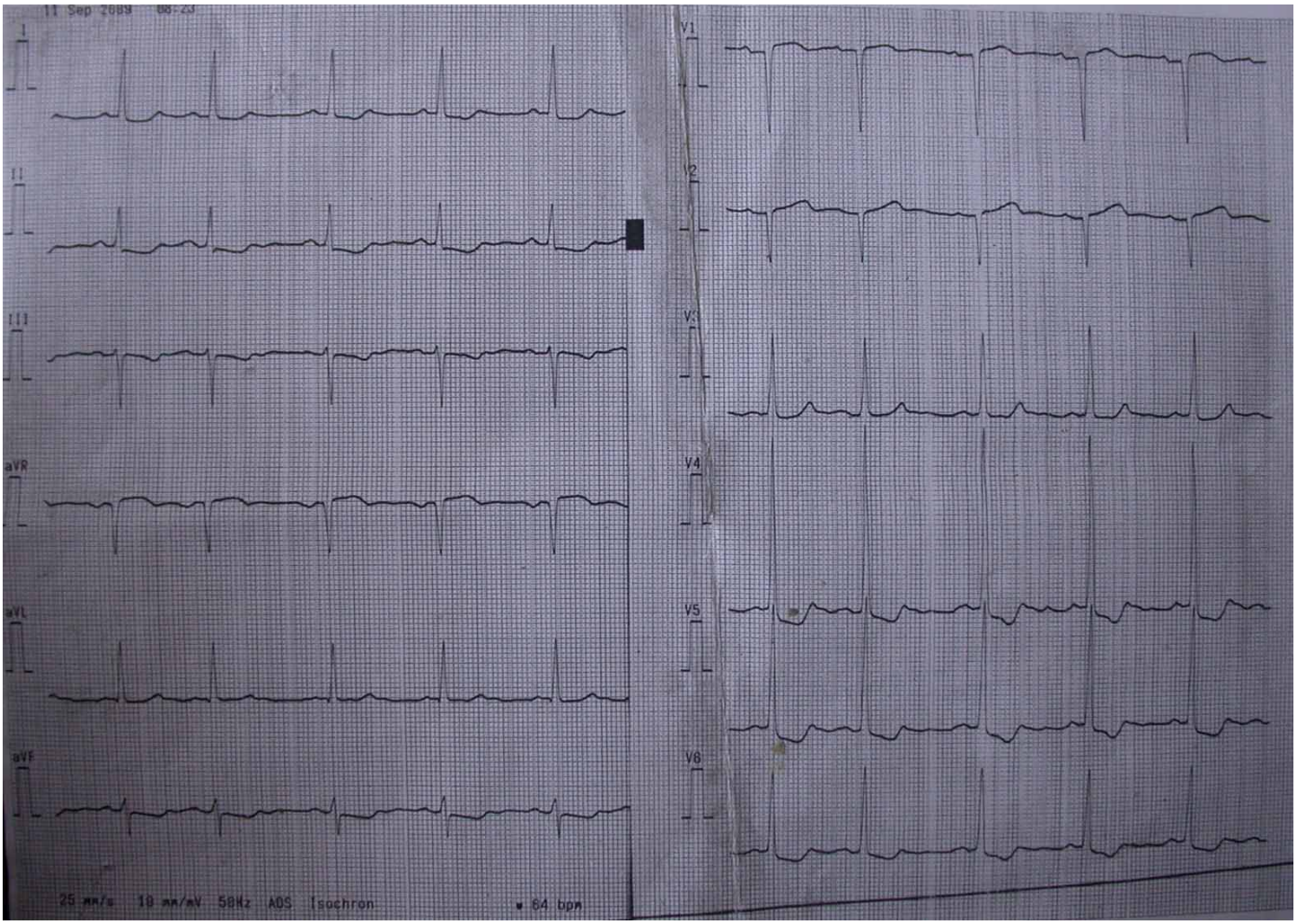
VALVE AORTIQUE :

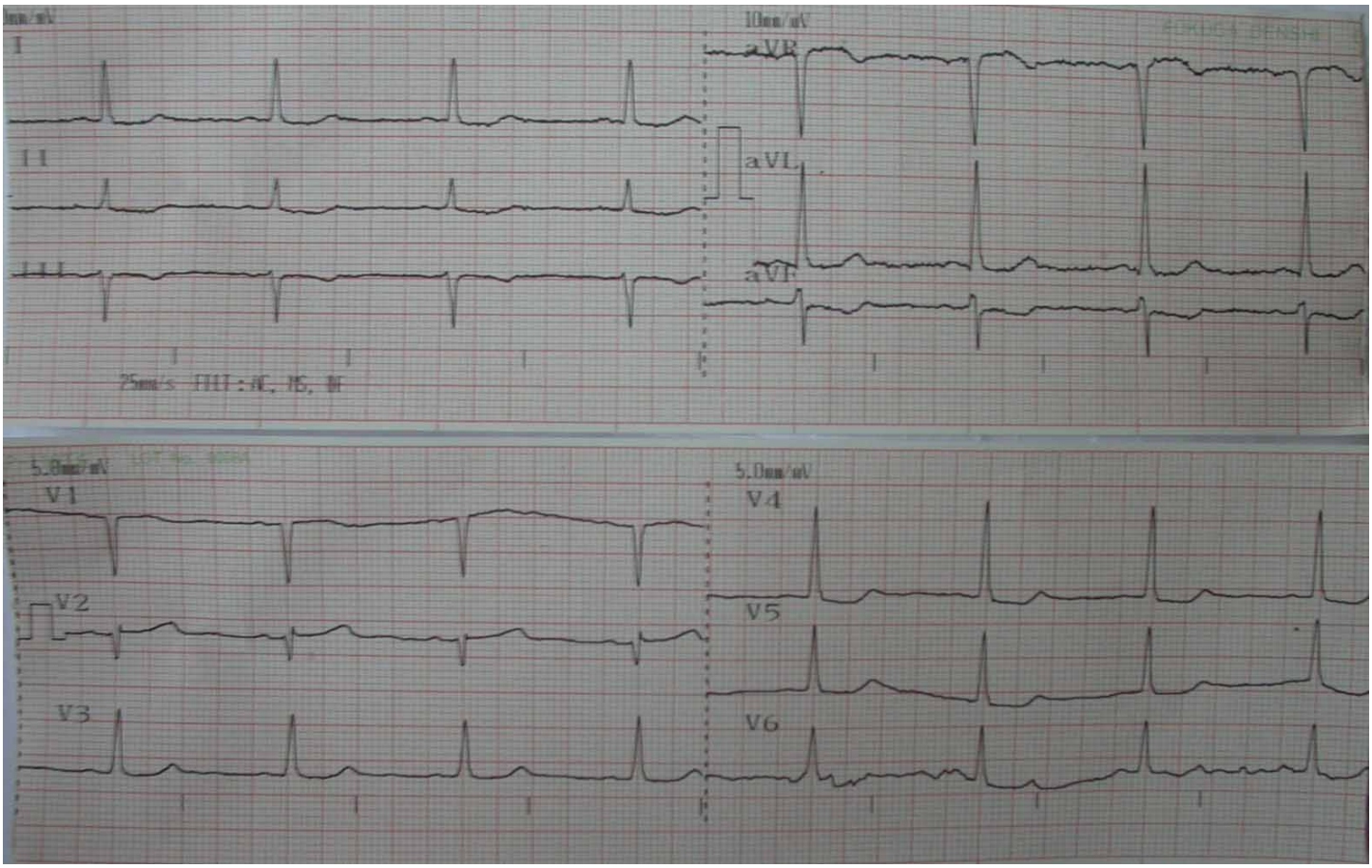
Anneau : ____ mm $\Delta P_{max/moy}$ = ____ / ____
Vel max : ____ m/s*(1-1,7)*
IA ☐ 1 /4 MA ☐ RA ☐ S_{perEff} = ____ cm²
DJ vc= ____ mm
PHT = 599 ms
EDTD = ____ cm/s

ETIOLOGIE :

MECANISME / ANALYSES LESIONNELLES:

IA 1/4


I
II
III
aVR
aVL
aVF
V1
V2
V3
V4
V5
V6
25 mm/s 10 mm/mV 50Hz ADS Isochron
♥ 64 bpm



Labs available locally: Hemoglobin, UA, Glucose, Stool Occult Blood, and Pregnancy Test

Specific Comments/Questions for Consultants: Do you agree with my assessment and plan?

Examined by: Nurse Sovann Peng **Date: September 29, 2009**

Please send all replies to kirihospital@gmail.com and cc: to rithychau@sihosp.org

From: **Lim kruy**
Date: Oct 1, 2009 9:39 AM
Subject: Re: Rattanakiri Telemedicine Clinic September 2009
To: Paul Heinzelmann <paul.heinzelmann@gmail.com>, rithychau@sihosp.org, jkvedar@partners.org, kfiamma@partners.org, Kiri Hospital Telemedicine <kirihospital@gmail.com>
Cc: bernie@media.mit.edu, thero@cambodiadaily.com, "Lauriebachrach@Yahoo. Com" <lauriebachrach@yahoo.com>

Dear Sovann and Polo,

Please ignor the first answer. I'm sorry

Thanks a lot for your case. It's very good define.

Most of your plan is sound good.

Concerning the Chlorpropramide doses, I did not know how many mg /tables that patient is using right now.
Maximum dose is 500mg but some book suggest 750mg. I would prefer only 500mg.
As her HbA1C is remain high(7.5) in July but FBS is remain high either.
You should increased accordingly, if reach the Max then Add Metformin 250mg BID.

Add Captoprile is good idea to help her AR/MR, uncontrole BP. Be careful of effect when combine HCTZ. May be she need to check BP at home for the first couple day to make sure the BP is Ok at hospital. Let's us know if any problem.

Please repeat all Lab, HbA1C, renal functional test, TSH for rule throide dysfunction.

Well, Thanks a lot and take a good take_ Hope no storm!!!
Enjoy your day

Kruy

From: **Kiri Hospital Telemedicine** <kirihospital@gmail.com>
Date: Oct 1, 2009 9:53 AM
Subject: RE: Rattanakiri Telemedicine Clinic September 2009
To: Lim kruy <kruylim@yahoo.com>, Paul Heinzelmann <paul.heinzelmann@gmail.com>, rithychau@sihosp.org, jkvedar@partners.org, kfiamma@partners.org
Cc: bernie@media.mit.edu, thero@cambodiadaily.com, "Lauriebachrach@Yahoo. Com" <lauriebachrach@yahoo.com>

Dear Dr. Kruy,

She uses Chlorpropramide 250mg bid for now and I will ask her to check BP and FBS every week, if FBS still over 200mg/dl, consider add Metformin 500mg qhs for her.

Best regards,
Sovann

From: **Kreinsen, Carolyn Hope,M.D.,M.Sc.** <CKREINSEN@partners.org>
Date: Oct 2, 2009 4:35 AM
Subject: RE: Rattanakiri Telemedicine Clinic September 2009
To: "Fiamma, Kathleen M." <KFIAMMA@partners.org>, kirihospital@gmail.com, rithychau@sihosp.org

Hi Sovann,

This is a challenging case! I'm going to jump right to the assessment and plan.

1.) Cardiac: I am very concerned about this woman. Her EKG from several weeks ago showed ischemic changes primarily in the inferior and lateral leads (Inferior - Biphasic T waves in II, III, AVF with greater than 1 mm ST depression in same leads. Lateral - greater than 1 mm ST depression in leads V4-V6) There was evidence as well of ST elevation in V1. Heart rate was in the 90s. It is reassuring that the ventricular wall motion on the subsequent 2D Echo looked normal and

that the ejection fraction was 70%. That indicates that the patient did not have a heart attack/MI affecting the ventricular function. With addition of atenolol, the heart rate slowed from 90s on the first EKG to 60 on the second (09/29) The most recent EKG showed some improvement from the first with less pronounced ST depression in the inferior and lateral leads and resolution of the ST changes in Lead V1. T wave changes persisted in II, III, AVF. This woman has multiple cardiac risk factors - suboptimally controlled diabetes and hypertension) Family history is not provided. She really needs a set of fasting lipids and a statin medication if her LDL is greater than 100. Most importantly, *****she needs a cardiac stress test as soon as possible.***** I believe her chest pain is angina. if the stress test is positive, she should see an internist or a cardiologist. *****She is at substantial risk for having an MI.****** It's excellent that you started ASA. The beta blocker, the ace inhibitor (captopril) and the diuretic (HCTZ) should all provide some protection. Good choices! If you have sealed bottles of nitroglycerin tablets, I would give one to this woman with instruction for her to use PRN for chest pain. 1 tablet sublingual - preferably while lying down - every 5 to 10 minutes for maximum of 3 tablets until chest pain is relieved. It is always good to advise the patient to remain lying down since blood pressure may drop and that she may develop a brief headache after using.

2. Hypertension: Blood pressure has been known to be severely elevated for one year; however, I suspect that it has been a longer term problem. Her echocardiogram shows a condition called diastolic dysfunction. The ventricles can't relax even when the heart is at rest. Her current medication regimen is, again, a good one for this problem. Patients sometimes feel chest heaviness and shortness of breath because of the diastolic dysfunction. beta blockers and diuretics tend to help that. I recommend checking electrolytes and BUN/creatinine now and one week after starting the captopril. Ace inhibitors can increase potassium levels. They can also decrease kidney function in patients with renovascular disease. If there is no problem after one week with those labs, I'd increase the captopril to every 8 hours. The dosage of HCTZ is a bit high. Again, keep an eye on the electrolytes so that her potassium and magnesium do not drop. The captopril, a "potassium sparing" drug may help to counter that. She definitely will need careful and frequent monitoring of her blood pressure. If not done already, I recommend that you test her TSH and obtain a urinalysis to check for protein and/or blood in the urine. Given her diabetes, ideally, her systolic blood pressure should between 120 and 130 and her diastolic should be between 70 and 79. A renal ultrasound, a test for c-reactive protein and, tests for renin and aldosterone levels may be advisable in the future if the blood pressure remains elevated. In looking at the patient's photo, she appears to have a goiter/thyroid enlargement. Again, I would check her TSH if not already done.

3. Diabetes Mellitus 2: It appears from the labs that you provided, that the patient's diabetes is not yet under good control. What dosage of chlorpropamide have you ordered for this patient to take BID? Did you increase the dosage when you just saw her, given the high fasting blood sugar? Again, I recommend that you monitor the patient's BUN and creatinine. If those start to climb, the dosage of chlorpropamide will require decrease. It's important to remember that this medication, along with some of the blood pressure lowering meds, can cause headaches and dizziness. (Also, there is some question that chlorpropamide may increase the risk of cardiac deaths in people who take it) I Sovann, do you have access to metformin? That might be a very good drug to introduce - 500 mg BID, if you have it, to help decrease blood sugars without putting the patient at increased risk of hypoglycemia. It can be used along with the chlopropamide. If you have a vibration hammer available or a microfilament, it would be good to do checks of this woman's feet now and every 6 months in the future to see if she is developing neuropathy (nerve involvement). She should see an ophthalmologist for an eye exam to check for retinopathy (eye involvement). It would be valuable to check a urine sample for microalbumin and for microalbumin/creatinine in the future to look for nephropathy (kidney involvement). I think on the chlorpropamide, it's always good to remind patients that a single dosage stays in their system for a long time and that they might develop low blood sugar if they skip a meal. I'm certain that you have reviewed diabetic diet recommendations with this woman. Those types of intervention are as important as medications in helping to control diabetes. Does she drink alcohol or smoke? Those would both be very detrimental to all of her health problems.

I hope this helps! Please keep me updated on how this woman is doing. As always, you do excellent work!

Have a great day,

Carolyn K

Thursday, October 1, 2009

Follow-up Report for Rattanakiri TM Clinic

There were 3 new patients and 1 follow up patient seen during this month TM clinic at Rattanakiri Referral Hospital (RRH). The data of 4 cases was transmitted and received replies from both Phnom Penh and Boston, other 13 patients came for follow up and refill medication only. Per advice sent by Partners in Boston and Phnom Penh Sihanouk Hospital Center of HOPE as well as advices from PA Rithy on site, the following patients were managed and treated per local staff:

[Please note that in general the practice of dispensing medications at RRH for all patients is usually limited to a maximum of 7 days treatment with expectation of patients to return for another week of supplies if needed be. This practice allows clinicians to monitor patient compliance to taking medications and to follow up on drug side effects, changing of medications, new arising symptoms especially in patients who live away from the town of Banlung and/or illiterate. Nearly all medications and some lab tests not available/done at RRH are provided by SHCH to TM patients at no cost]

Treatment Plan for Rattanakiri TM Clinic September 2009

1. PV#00322, 39F (Village VI)
Diagnosis:

1. Molar pregnancy?

Treatment:

1. D & C at Rattanakiri referral hospital
2. Ibuprofen 400mg 1t po bid prn pain

2. HK#00323, 66F (Village VI)
Diagnosis:

1. Left sciatica
2. Hyperglycemia

Treatment:

1. Ibuprofen 400mg 1t po bid x 1 month
2. Do regular exercise and warmth compression
3. Educate on diabetic diet, low fats/salt
4. Recheck Gluc in two weeks if still elevated, start her with diabetic drug
5. Draw blood for Lyte, BUN, Creat, Gluc and HbA1C at SHCH

Lab result on October 1, 2009

Na	=144	[135 - 145]
K	=3.5	[3.5 - 5.0]
Cl	=110	[95 - 110]
BUN	=1.4	[0.8 - 3.9]
Creat	=110	[44 - 80]
Gluc	=9.4	[4.2 - 6.4]
HbA1C	=7.5	[4 – 6]

3. MT#00324, 53F (Village III)
Diagnosis:

1. Cervical spine fusion (C3, C4)?
2. Cervical nerve compression?
3. Osteophyte vertebrae

Treatment:

1. Ibuprofen 400mg 1t po bid x 1 month
2. Physiotherapy with exercise and worm compression

4. NH#00010, 55F (Village III)
Diagnosis:

1. HTN
2. DMII
3. VHD (AI/MR)

Treatment:

1. Atenolol 50mg 1t po bid
2. Chlorpropramide 250mg 1t po bid
3. ASA 300mg 1/4t po qd
4. HCTZ 50mg 1t po qd
5. Captopril 25mg 1/2t po bid
6. Draw blood for Lyte, BUN, Creat, Gluc, HbA1C and TSH at SHCH

Lab result on October 1, 2009

Na	=136	[135 - 145]
K	=3.8	[3.5 - 5.0]
Cl	=104	[95 - 110]
BUN	=1.6	[0.8 - 3.9]
Creat	=99	[44 - 80]
Gluc	=16.3	[4.2 - 6.4]
TSH	=1.83	[0.49 - 4.67]
HbA1C	=7.9	[4 – 6]

Patients who come for follow up and refill medication

1. PS#00149, 26F (Village I)
Diagnosis:

1. Euthyroid Goiter

Treatment:

1. Carbimazole 5mg 1t po qd (#100)
2. Draw blood for Free T4 at SHCH

Lab result on October 1, 2009

Free T4 =12.44 [9.14 – 23.81]

2. OT#00155, 45F (Bor Keo)
Diagnosis:

1. HTN
2. DMII

Treatment:

1. Metformin 500mg 2t po bid (#400)
2. Captopril 25mg 1/2t po tid (#150)
3. ASA 300mg ¼t po qd (#25)
4. Insulin NPH 20UI qAM
5. Amitriptylin 25mg ½ po qhs (buy)

3. SV#00256, 43M (Village I)
Diagnosis:

1. DMII

Treatment:

1. Glibenclamide 5mg 2t po qd (buy)
2. Metformin 500mg 2t po bid (#400)

4. SS#00258, 61F (Village III)
Diagnosis :

1. DMII

Treatment:

1. Glibenclamide 250mg 1t po qd (#100tab)

5. BS#00265, 51M (Village VI)
Diagnosis:

1. DMII

Treatment:

1. Glibenclamide 5mg 2t po bid (buy)
2. Metformin 500mg 1t po qhs (#100)
3. Captopril 25mg 1/4t po bid (#25)
4. ASA 500mg 1/4t po qd (#25)

6. TV#00267, 55F (Village II)
Diagnosis:

1. DMII

Treatment:

1. Metformin 500mg 2t po bid (#400)
2. Glibenclamdie 5mg 1t po qd (#100)
3. Captopril 25mg 1/4t po bid (buy)
4. ASA 300mg 1/4t po qd (#25)

7. VC#00268, 66M (Bey Srok Village)
Diagnosis:

1. DMII

Treatment:

1. Metformin 500mg 2t po qAM and 3t qPM (#400tab)
2. Glibenclamide 5mg 2t po bid (#buy)
3. Captopril 25mg 1/4t po qd (#25tab)
4. ASA 300mg 1/4t po qd (#25tab)

8. OE#00273, 65M (Village I)
Diagnosis:

1. DMII with PNP
2. Pleural effusion

Treatment:

1. Glibenclamide 5mg 2t po bid (#400tab)
2. Captopril 25mg 1/4t po qd (buy)
3. ASA 300mg 1/4t po qd (#25tab)
4. Amitriptylin 25mg 1/2t po qhs (#50tab)
5. MTV 1t po qd for one month

9. SS#00299, 46F (Thmey Village)
Diagnosis:

1. DMII

Treatment:

1. Glibenclamide 5mg 2tab bid (#400)
2. ASA 300mg 1/4 tab qd (#25)

3. Fenofibrate 100mg 1tb qd (BUY)
4. Captopril 25mg 1/4 tab bid (#50)

10. NV#00306, 25M (Thmey Village)
Diagnosis:
1. DM

Treatment:
1. Glibenclamide 5mg 2t po bid (#400)
2. Captopril 1/4t po qd (#25)
3. ASA 300mg 1/4t po qd (#25)

11. KS#00312, 55F (Village I)
Diagnosis:
1. HTN

Treatment:
1. HCTZ 50mg 1/2t po qd (#50)
2. ASA 300mg 1/4t po qd (buy)

12. CT#00318, 31F (Village I)
Diagnosis:
1. DMII

Treatment:
1. Metformin 500mg 1t po bid
2. Educate on diabetic diet, low salt/fats, do regular exercise and foot care

13. TS#00320, 51M (Village V)
Diagnosis:
1. DMII

Treatment:
1. Glibenclamide 5mg 2t po bid
2. Draw blood for CBC, Lyte, BUN, Creat, Gluc and HbA1C at SHCH

Lab result on October 1, 2009

WBC	=5.1	[4 - 11x10^9/L]	Na	=139	[135 - 145]
RBC	=5.5	[4.6 - 6.0x10^{12}/L]	K	=4.9	[3.5 - 5.0]
Hb	=16.1	[14.0 - 16.0g/dL]	Cl	=110	[95 - 110]
Ht	=45	[42 - 52%]	BUN	=1.7	[0.8 - 3.9]
MCV	=84	[80 - 100fl]	Creat	=134	[53 - 97]
MCH	=29	[25 - 35pg]	Gluc	=7.3	[4.2 - 6.4]
MHCH	=35	[30 - 37%]	HbA1C	=7.2	[4 – 6]
Plt	=216	[150 - 450x10^9/L]			
Lym	=3.0	[1.0 - 4.0x10^9/L]			

The next Rattanakiri TM Clinic will be held in December 2009