

**Telemedicine Clinic**  
*Rattanakiri*  
**Referral Hospital**  
**March 2011**

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

On Tuesday March 15 and Wednesday March 16, 2011, Rattanakiri Referral Hospital (RRH) staffs began their TM clinic. Patients 1 new and 1 follow up cases 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 March 17, 2011, 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** <kirihospital@gmail.com>

Date: Wed, Mar 9, 2011 at 4:26 PM

Subject: TM clinic at Rattanakiri Referral Hospital

To: "Paul J. M.D. Heinzelmann" <paul.heinzelmann@gmail.com>, Joseph Kvedar <jkvedar@partners.org>, "Kathleen M. Kelleher" <kfiamma@partners.org>, Rithy Chau <rithychau@sihosp.org>, Cornelia Haener <corneliahaener@sihosp.org>, Kruiy Lim <kruylim@yahoo.com>, Brian Hammond <bhammond@partners.org>

Cc: Bernie Krisher <bernie@media.mit.edu>, Noun SoThero <thero@cambodiadaily.com>, Ed & Laurie Bachrach <lauriebachrach@yahoo.com>

Dear All,

Please be informed that the TM clinic at Rattanakiri Referral Hospital will be held on Wednesday, March 16, 2011 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, March 17, 2011. 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,  
MA Koh Polo

From: **Hospital Rattanakiri Referral** <kirihospital@gmail.com>  
Date: Wed, Mar 16, 2011 at 3:15 PM  
Subject: Rattanakiri Telemedicine Clinic, Patient CS#RK00040, 29F  
To: Radiology Boston <radiologyexchange@gmail.com>, vannarithchea@sihosp.org, Rithy Chau <rithychau@sihosp.org>, "Kathleen M. Kelleher" <kfiamma@partners.org>, "Paul J. M.D. Heinzelmann" <paul.heinzelmann@gmail.com>, Joseph Kvedar <jkvedar@partners.org>, Kruy Lim <kruylim@yahoo.com>  
Cc: Bernie Krisher <bernie@media.mit.edu>, Noun SoThero <thero@cambodiadaily.com>, Ed & Laurie Bachrach <lauriebachrach@yahoo.com>

Dear all,

There are one new and one follow up case for Rattanakiri Telemedicine Clinic March 2011. This is patients CS#RK00040, 29F (follow up patient) and photos.

Best regards,  
Sovann

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



**Patient: CS#RK00040, 29F (Village I)**

**Subject:** 29F with past history of VHD and got surgery on October 6, 2004 with valve replacement in heart center in Phnom Penh. She got treatment and followed up with the heart center doctor and completed the treatment for one year. The doctor told her that she didn't need any more treatment and advise to come back if the symptoms reappeared.

In these two months, she presented with joint pain, swelling, stiffness which started on PIP, wrist, toes, ankle and knee. The symptoms affect symmetrically, got worse with cold temperature and better in the day times. She denied of fever, cough, CP, palpitation, GI complaint, oliguria, hematuria, dysuria. She didn't get treatment for the symptoms yet.



**Medication:** None

**Allergies:** NKDA

**Object:**

**Vital Signs:** BP: 106/72      P: 88      R: 20      T: 37°C      Wt: 46Kg

**General:** Look stable

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

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



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

**Extremity/Skin:** PIP swelling, tender, mild stiffness, no warmth; other joint as MCP, wrist, elbow, toe, ankle and knee tender on motion, no swelling, no stiffness; no skin rashes/lesion

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

**Previous Lab/Studies:** None

**Assessment:**

1. RA?

**Plan:**

1. Ibuprofen 200mg 3t po bid prn pain
2. Paracetamol 500mg 1-2t po qid prn
3. Draw blood for CBC, Lyte, BUN, Creat, Gluc, ESR, LFT, RF 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:** Nurse Sovann Peng

**Date:** March 16, 2011



Please send all replies to [kirihospital@gmail.com](mailto:kirihospital@gmail.com) and cc: to [rithychau@sihosp.org](mailto:rithychau@sihosp.org)

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**From:** Vannarith Chea <[vannarithchea@sihosp.org](mailto:vannarithchea@sihosp.org)>

**Date:** Wed, Mar 16, 2011 at 9:08 PM

**Subject:** RE: Rattanakiri Telemedicine Clinic, Patient CS#RK00040, 29F

**To:** Hospital Rattanakiri Referral <[kirihospital@gmail.com](mailto:kirihospital@gmail.com)>

Dear Rithy,

Thanks for refer these case to discuss with me together.

On the CXR:

There is evidence of the mild interstitial pattern changes of right lung parenchyma especially to right lower lung parenchyma.

There is no evidence of the lesion, known as active or infiltrate in the both sides of lung parenchyma.

The hilar zone is normal appearance.

There is no evidence of the bony or soft tissue structure of thorax.

Impression:

This appearance may suggest to collageneous disease such as RA or arthritis in beginning staage(early stage) but it seems be involved to right lung parenchyma.

Please follow up and compare with next CXR in next 6 months.

On the both sides of hand X-Ray

There is no evidence of the joint changes or an abnormality on bony structure of plan radiograph.

Best wishes and success in your mission.

Vannarith

From: **Garry Choy** <garryc@gmail.com>

Date: Thu, Mar 17, 2011 at 11:37 AM

Subject: Re: Rattanakiri Telemedicine Clinic, Patient CS#RK00040, 29F

To: Hospital Rattanakiri Referral <kirihospital@gmail.com>

Cc: Radiology Boston <radiologyexchange@gmail.com>, vannarithchea@sihosp.org, Rithy Chau <rithychau@sihosp.org>, "Kathleen M. Kelleher" <kfiamma@partners.org>, "Paul J. M.D. Heinzelmann" <paul.heinzelmann@gmail.com>, Joseph Kvedar <jkvedar@partners.org>, Kruiy Lim <kruylim@yahoo.com>, Bernie Krisher <bernie@media.mit.edu>, Noun SoThero <thero@cambodiadaily.com>, Ed & Laurie Bachrach <lauriebachrach@yahoo.com>

Dear all,

Thanks for the opportunity again to participate in the Telemedicine clinic.

CXR: No acute focal consolidations to indicate pneumonia or pulmonary edema. Scattered areas of linear opacity likely scarring and also scattered probable granulomas in a patient of this age/absence of any history of malignancy.

X-Ray of Hands: No radiographic evidence of erosive arthropathy at this time. Joint spaces are intact with articular surfaces preserved at the DIP, PIP, carpal joints.

Best regards,

Garry

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From: **Hospital Rattanakiri Referral** <kirihospital@gmail.com>

Date: Wed, Mar 16, 2011 at 3:19 PM

Subject: Rattanakiri Telemedicine Clinic, Case SK#RK00359, 25M

To: "Kathleen M. Kelleher" <kfiamma@partners.org>, "Paul J. M.D. Heinzelmann" <paul.heinzelmann@gmail.com>, Joseph Kvedar <jkvedar@partners.org>, Rithy Chau <rithychau@sihosp.org>, Kruiy Lim <kruylim@yahoo.com>

Cc: Bernie Krisher <bernie@media.mit.edu>, Noun SoThero <thero@cambodiadaily.com>, Ed & Laurie Bachrach <lauriebachrach@yahoo.com>

Dear all,

This is patient SK#RK00359, 25M and photo.

Thank you every much for the cooperation and support in this project.

Best regards,

Sovann

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



**Patient:** SK#RK00359, 25M (Village III)

**Chief Complaint:** Epigastric pain x 1 month

**HPI:** 25M, cloth seller in local market, with history of PTB and got TB med 3t qd for 3 months then AFB smear neg. In 5months after TB med, AFB smear rechecked with positive result then he was diagnosed with TB med resistance patient and treated with streptomycin injection for two months. The ABF smear was still positive so he was retreated with 13t of TB medicine per day. He was detained in the prison due to his personal problem and didn't take regular meal. One day he drank alcohol, about 6h later, he developed with symptoms of fever, abdominal pain, watery diarrhea then became unconsciousness, and seizure. He was brought to provincial hospital on

February 20, 2011 and treated with IV fluid, Amoxicillin, Metronidazole and Cimetidine, Paracetamol. He still presented with diarrhea with black stool, about 10times per day, foul smelling and fever. Because of persistent bloody diarrhea, he was treated with Ceftriaxone 1g bid, Metronidazole and Cimetidine. Now he still presented with mild fever, diarrhea several times per day. Patient have done HIV test for few times with negative result.

**PMH/SH:** Surgery to remove the blood clot extradural due to Motor accident in 2008

**Family Hx:** Parents with PTB and father died in 1993 due to TB

**Social Hx:** Heavy alcohol drinking, no cig smoking, married with one child

**Medication:**

1. Cetriaxon 2g IV
2. Metronidazole 250mg tid
3. Cimetidine 400mg IV

**Allergies:** NKDA

**ROS:** (+) fever, no HA, no edema, no oliguria, no dysuria, no hematuria

**PE:**

**Vital Signs:** BP: 118/71 P: 88 R: 20 T: 37.5°C Wt: 50kg

**General:** Look stable

**HEENT:** No oropharyngeal lesion, pink conjunctiva, no icterus, no thyroid enlargement, no lymph node palpable, no JVD

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

**Abdomen:** Moderate tender and tympany on Epigastric and RUQ, no distension, no HSM, no scar, no rashes, no abd bruit, neg rebound tenderness

**Extremities/Skin:** No leg edema, no lesion, palpable dorsalis pedis and posterior tibial pulse

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

**Rectal exam:** Good sphincter tone, no mass palpable, (+) colocheck

**Lab/Study:**

Abd Ultrasound: normal conclusion

Malaria smear negative result

WBC : 24000/mm<sup>3</sup>  
RBC : 4070000/mm<sup>3</sup>  
Hb : 14  
Htc : 38  
MCV : 94.4  
Plt : 263000  
Eosinophil : 0.4%  
Neut : 71%  
Lymph: 20%  
Monocyte: 0.5%

Creat : 1.4	[0.5 – 0.9]
Gluc : 61.9	[75 – 115]
K : 3.5	[3.5 – 5.5]
Urea : 19	[10 – 50]
Uric acid: 12.5	[3.4 – 7.0]

**Assessment:**

1. PUD
2. PTB

**Plan:**

1. Clarithromycin 500mg 1t po bid for 2w
2. Amoxicillin 500mg 2t po bid for 2w
3. Omeprazole 20mg 1t po bid for 2w then 1t po qhs for other one month
4. Metoclopramide 10mg 1t po qhs for 2w
5. Drink water 3-4L per day
6. TB Treatment in local hospital

**Comments/Notes: Do you agree with my assessment and plan?**

**Examined by: Nurse Sovann Peng**

**Date: March 16, 2011**

Please send all replies to [kirihospital@gmail.com](mailto:kirihospital@gmail.com) and cc: to [rithychau@sihosp.org](mailto:rithychau@sihosp.org)

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No answer replied

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# Thursday, March 17, 2011

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## Follow-up Report for Rattanakiri TM Clinic

There were 1 new patient and 1 follow up patient seen during this month TM clinic at Rattanakiri Referral Hospital (RRH). The data of 2 cases was transmitted and received replies from both Phnom Penh and Boston, and other 14 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 March 2011

#### 1. CS#RK00040, 29F (Village I)

##### Diagnosis:

1. RA?

##### Treatment:

1. Ibuprofen 200mg 3t po bid prn pain (#50)
2. Draw blood for CBC, Lyte, BUN, Creat, Gluc, ESR, LFT, RF at SHCH

##### Lab result on March 17, 2011

WBC	=9.5	[4 - 11x10 <sup>9</sup> /L]	Na	=138	[135 - 145]
RBC	=4.5	[3.9 - 5.5x10 <sup>12</sup> /L]	K	=3.7	[3.5 - 5.0]
Hb	=12.7	[12.0 - 15.0g/dL]	Cl	=105	[95 - 110]
Ht	=40	[35 - 47%]	BUN	=1.7	[0.8 - 3.9]
MCV	=90	[80 - 100fl]	Creat	=58	[44 - 80]
MCH	=28	[25 - 35pg]	Gluc	=9.6	[4.2 - 6.4]
MHCH	=31	[30 - 37%]	SGOT	=32	[<31]
Plt	=297	[150 - 450x10 <sup>9</sup> /L]	SGPT	=20	[<32]
Lym	=3.0	[1.0 - 4.0x10 <sup>9</sup> /L]	RF	= Positive 1/32	
Mxd	=0.8	[0.1 - 1.0x10 <sup>9</sup> /L]			
Neut	=5.7	[1.8 - 7.5x10 <sup>9</sup> /L]			
ESR	=40	[0 - 25]			

#### 2. SK#RK00359, 25M (Village III)

##### Diagnosis:

1. PUD
2. PTB

##### Treatment:

1. Clarithromycin 500mg 1t po bid for 2w (#56)
2. Amoxicillin 500mg 2t po bid for 2w (#56)
3. Omeprazole 20mg 1t po bid for 2w then Famotidine 20mg 2t po qhs for other one month (#60)
4. Drink water 3-4L per day
5. TB Treatment in local hospital

**Patients who come to follow up and refill medicine**

**1. NH#RK00010, 55F (Village III)**

**Diagnosis:**

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

**Treatment:**

1. Atenolol 50mg 1t po bid (#200)
2. Chlorpropramide 250mg 1t po bid (buy)
3. HCTZ 50mg 1t po qd (#100)
4. Captopril 25mg 1t po bid (buy)

**2. UP#RK00093, 51F (Village I)**

**Diagnosis:**

1. Hyperthyroidism

**Treatment:**

1. Carbimazole 1t po bid
2. Propranolol 40mg 1/4t po bid
3. Draw blood for TSH and Free T4 at SHCH

**Lab result on March 17, 2011**

TSH	=<0.005	[0.27 - 4.20]
Free T4	=29.46	[12.0 - 22.0]

**3. PS#RK00149, 29F (Village I)**

**Diagnosis:**

1. Hyperthyroidism

**Treatment:**

1. Draw blood for Free T4 at SHCH

**Lab result on March 17, 2011**

Free T4	=14.67	[12.0 - 22.00]
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**4. OT#RK00155, 45F (Bor Keo)**

**Diagnosis:**

1. HTN
2. DMII

**Treatment:**

1. Metformin 500mg 2t po bid (#400)
2. Captopril 25mg 1/2t po bid (#buy)
3. Atenolol 50mg 1/2t po bid (buy)
4. ASA 300mg 1/4t po qd (#25)
5. Amitriptylin 25mg 1/2t po qhs (#50)
6. Insulin NPH 23UI qAM and 5UI qPM
7. Draw blood for Lyte, Creat, Gluc, HbA1C at SHCH

**Lab result on March 17, 2011**

WBC	=7.6	[4 - 11x10 <sup>9</sup> /L]	Na	=134	[135 - 145]
RBC	=5.2	[3.9 - 5.5x10 <sup>12</sup> /L]	K	=4.8	[3.5 - 5.0]
Hb	=12.3	[12.0 - 15.0g/dL]	Cl	=99	[95 - 110]
Ht	=39	[35 - 47%]	Creat	=81	[44 - 80]
MCV	=75	[80 - 100fl]	Gluc	=14.7	[4.2 - 6.4]
MCH	=24	[25 - 35pg]	HbA1C	=8.3	[4 - 6]



MHCH =32	[30 - 37%]
Plt =399	[150 - 450x10 <sup>9</sup> /L]
Lym =3.1	[1.0 - 4.0x10 <sup>9</sup> /L]

#### 5. OH#RK00230, 59F (Village III)

##### Diagnosis:

1. Euthyroid
2. HTN

##### Treatment:

1. HCTZ 50mg 1/2t po qd (#50)
2. Captopril 25mg 1/2t po bid (buy)

#### 6. KC#RK00260, 44F (Village V)

##### Diagnosis:

1. DMII

##### Treatment:

1. Metformin 500mg 1t po bid (#200)
2. Draw blood for Gluc and HbA1C at SHCH

##### Lab result on March 17, 2011

Gluc =8.3	[4.2 - 6.4]
HbA1C =8.6	[4 - 6]

#### 7. VC#RK00268, 66M (Bey Srok Village)

##### Diagnosis:

1. DMII

##### Treatment:

1. Metformin 500mg 2t po qAM and 3t qPM (buy)
2. Glibenclamide 5mg 2t po bid (#400)
3. Captopril 25mg 1/4t po qd (buy)
4. ASA 300mg 1/4t po qd (#25)
5. Draw blood for Gluc and HbA1C at SHCH

##### Lab result on March 17, 2011

Gluc =12.5	[4.2 - 6.4]
HbA1C =10.3	[4 - 6]

#### 8. SS#RK00299, 46F (Thmey Village)

##### Diagnosis:

1. DMII

##### Treatment:

1. Glibenclamide 5mg 2tab bid (#400)
2. Captopril 25mg 1/4 tab bid (buy)

#### 9. NV#RK00306, 25M (Thmey Village)

##### Diagnosis:

1. DMII

##### Treatment:

1. Glibenclamide 5mg 2t po bid (#400)
2. Captopril 25mg 1/4t po qd (buy)
3. ASA 300mg 1/4t po qd (buy)
4. Draw blood for Gluc and HbA1C at SHCH

##### Lab result on March 17, 2011

Na	=132	[135 - 145]
K	=3.6	[3.5 - 5.0]
Cl	=97	[95 - 110]
BUN	=2.8	[0.8 - 3.9]
Creat	=114	[53 - 97]
Gluc	=17.4	[4.2 - 6.4]
HbA1C	=13.7	[4 - 6]

**10. CT#RK00318, 31F (Village I)**

**Diagnosis:**

1. DMII

**Treatment:**

1. Metformin 500mg 2t po bid (#200) + buy
2. Draw blood for Gluc and HbA1C at SHCH

**Lab result on March 17, 2011**

Gluc	=9.4	[4.2 - 6.4]
HbA1C	=8.6	[4 - 6]

**11. TS#RK00320, 51M (Village V)**

**Diagnosis:**

1. DMII

**Treatment:**

1. Glibenclamide 5mg 2t po bid (#400)
2. Draw blood for Gluc and HbA1C at SHCH

**Lab result on March 17, 2011**

Gluc	=13.0	[4.2 - 6.4]
HbA1C	=11.5	[4 - 6]

**12. HY#RK00341, 41M (Village VI, Labansirk commune)**

**Diagnosis:**

1. DMII
2. HTN

**Treatment:**

1. Metformine 500mg 1t po bid (#200)
2. Glibenclamide 5mg 2t po bid (#400)
3. Atenolol 50mg 1/2t po qd (buy)
4. Captopril 25mg 1/2t po bid (buy)
5. Amitriptylin 25mg 1/4t po qhs (buy)
6. Educate on diabetic diet, foot care and do regular exercise
7. Draw blood for Lyte, BUN, Creat, Gluc, HbA1C at SHCH

**Lab result on March 17, 2011**

Creat	=82	[53 - 97]
Gluc	=6.3	[4.2 - 6.4]
HbA1C	=6.3	[4 - 6]

**13. CD#RK00348, 50F (Bake Village, Veun Sai)**

**Diagnosis:**

1. Euthyroid goiter

**Treatment:**

1. Do FNA for Cytology at SHCH
2. Draw blood for TSH and Free T4 at SHCH

**Lab result on March 17, 2011**

TSH =1.12 [0.27 - 4.20]  
Free T4=17.27 [12.0 - 22.0]

**FNA result on March 21, 2011:**

Macroscopy: FNA

Microscopy: The FNA smears present many red blood cells associated with some colloid nodules and some sheets with bad preserved epithelial thyroid cells. There is no evidence of malignancy.

Conclusion: Benign goiter

**14. NS#RK00356, 60F (Village I, Kachagn)**

**Diagnosis:**

1. DMII with PNP
2. HTN

**Treatment:**

1. Glibenclamide 5mg 2t po bid (#400)
2. Metformin 500mg 1t po bid (#200)
3. Captopril 25mg 2t po bid (buy)
4. HCTZ 50mg 1/2t po qd (#50)
5. ASA 81mg 1t po qd (buy)
6. Fenofibrate 100mg 1t po qhs (buy)
7. Amitriptylin 25mg 1/2t po qhs (buy)
8. Review on diabetic diet, do regular exercise and foot care
9. Draw blood for Creat, Gluc, Tot chole, TG, HbA1C at SHCH

**Lab result on March 17, 2011**

Creat =145 [44 - 80]  
Gluc =5.8 [4.2 - 6.4]  
T. Chol =5.2 [<5.7]  
TG =1.4 [<1.71]  
HbA1C =4.4 [4 - 6]

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**The next Rattanakiri TM Clinic will be held in  
June 2011**