## Telemedicine Clinic Rattanakiri Referral Hospital September 2012

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

On Tuesday September 18 and Wednesday September 19, 2012, Rattanakiri Referral Hospital (RRH) staffs began their TM clinic. Patients 5 new 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 September 20, 2012, the TM clinic opened again to receive the same patients and other followup 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, Sep 12, 2012 at 4:13 PM Subject: Telemedicine Clinic September 2012 at Rattanakiri Referral Hospital To: "Kathleen M. Kelleher" <kfiamma@partners.org>, "Paul J. M.D. Heinzelmann" <paul.heinzelmann@gmail.com>, Joseph Kvedar <jkvedar@partners.org>, Cornelia Haener <corneliahaener@sihosp.org>, Kruy Lim <kruylim@yahoo.com>, Rithy Chau <rithychau@sihosp.org> Cc: Bernie Krisher <berkrish@gmail.com>, 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 Tuesday and Wednesday, September 18 - 19, 2012 beginning at 8:00am local time for full day. We expect to enter and transmit the patient data to those of you at SHCH and at Partner in Boston on Wednesday evening.

Please try to respond before noontime the following day, Thursday, September 20, 2012. 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 support in the project.

Best regards, Koh Polo

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

Date: Wed, Sep 19, 2012 at 5:13 PM Subject: Rattanakiri TM clinic September 2012, Case#1, CS#RK00390, 51F To: "Kathleen M. Kelleher" <kfiamma@partners.org>, "Paul J. M.D. Heinzelmann" <paul.heinzelmann@gmail.com>, Joseph Kvedar <jkvedar@partners.org>, Chau Rithy <chaurithy@gmail.com>, Kruy Lim <kruylim@yahoo.com> Cc: Bernie Krisher <berkrish@gmail.com>, Noun SoThero <thero@cambodiadaily.com>, Ed & Laurie Bachrach <lauriebachrach@yahoo.com>

Dear all,

There are five new cases for Rattanakiri Telemedicine clinic September 2012. This is case number 1, CS#RK00390, 51F and photos.

Best regards, Polo/Sovann

## Rattanakiri Provincial Hospital Telemedicine Clinic with Sihanouk Hospital Center of HOPE and Center for Connected Health



Patient: CS#RK00390, 51F (Village I, LBS)

**Chief Complaint:** Both legs edema on/off x 6y and persistent edema for 2 months

**HPI:** 51F with presented symptoms of polyuria, polydypsia and fatigue and consulted in the private clinic and blood sugar 202mg/dl and glucose in urine 4+ and diagnosed with DMII and treated with Metformin 850mg 1t at evening and Diamicron 30mg 2t in the morning with regular follow up with private clinic. About two years later, she noticed of mild edema of both legs which last in about several days. In these

two months, she noticed of persistence edema of both legs so she went to see doctor in Phnom Penh and added Furosemide 40mg 1t bid for several days, which help in relieving the edema but recurred in several days after treatment. She denied of fever, cough, chest pain, palpitation, abdominal pain, bloody/mucus stool, oliguria, hematuria.

PMH/SH: no HTN, no DMII, no past surgery

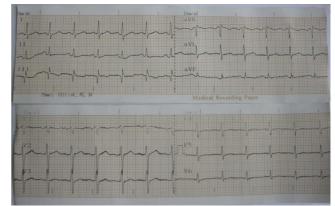
**Family Hx:** Brother with diabetes, no family member with HTN, or heart disease

**Social Hx**: No cig smoking, no tobacco chewing, no EtOH

Medication: None

Allergies: NKDA

**ROS:** Unremarkable



PE: Vital Signs: BP: 135/101 P: 104 RR: 20 T: 37°C Wt: 95kg

General: Look stable, obesity

**HEENT:** No oropharyngeal lesion, pink conjunctiva, no thyroid enlargement, no neck lymph nodes palpable, no JVD

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

**Abdomen:** Soft, no distensión, no tender, (+) BS, no HSM, no surgical scar

**Extremities/Skin:** Hyperpigmented keratotic papule rash on the face, upper arms and legs, spare on the trunk, neck; No legs edema, (+) dorsalis pedis and posterior tibial pulse, no foot wound

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

## Lab/Study:

## Lab result on July 26, 2012

=9.5	[4 - 10x10 <sup>9</sup> /L] [3.8 - 5.3x10 <sup>12</sup> /L]
=4.7	[3.8 - 5.3x10 <sup>12</sup> /L]
=12.8	[12.0 - 15.0g/dL]
=37.5	[35 - 47%]
=78.8	[80 - 100fl]
=26	[25 - 35pg]
=34	[30 - 37%]
=363	[150 - 450x10 <sup>9</sup> /L]
=4.0	[1.00 - 4.00x10 <sup>9</sup> /L]
=0.3	[0.10 - 1.00x10 <sup>9</sup> /L]
=5.1	[1.80 - 7.50x10 <sup>9</sup> /L]
	=4.7 =12.8 =37.5 =78.8 =26 =34 =363 =4.0 =0.3

Na	=141	[135 - 145]
K	=4.4	[3.5 - 5.0]
CI	=107	[95 – 110]
BUN	=42	[10 - 50]
Creat	=10	[6 - 11]
Gluc	=250	[75 - 110]
T. Cho	l =290	[140 - 250]
TG	=520	[40 - 145]
Uric Ac	ci =97	[24 - 57]
AST	=46	[<31]
ALT	=54	[<31]
HbsA	g	reaction negative
HbsA	b	reaction positive
HCV /	Ab	reaction negative

Abdominal ultrasound conclusion: Hepatic steatosis

Heart ultrasound conlusion: hypertensive cardiopathy

## On September 19, 2012

U/A: no protein, no gluocose, no blood, no leukocyte

FBS: 204mg/dl

### Assessment:

- 1. DMII
- 2. HTN
- 3. Lichen dermatitis





4. Obesity

## Plan:

- 1. Metformin 500mg 2t po bid
- 2. Captopril 25mg 1t po bid
- 3. Amlodipine 10mg 1/2t po bid
- 4. HCTZ 25mg 1t po qd
- 5. Educate on diabetic diet, regular exercise and foot care
- 6. Draw blood for BUN, Creat, glucose, Tot chole, TG and HbA1C at SHCH

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

# Examined by: Miss Lam Srey Aun (medical student)/Nurse Sovann Peng Date: September 19, 2012

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

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No answer replied

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

Date: Wed, Sep 19, 2012 at 5:17 PM

Subject: Rattanakiri TM Clinic September 2012, Case#2, LP#RK00391, 56M

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

Cc: Bernie Krisher <berkrish@gmail.com>, Noun SoThero <thero@cambodiadaily.com>, Ed & Laurie Bachrach <lauriebachrach@yahoo.com>

Dear all,

This is case number 2, LP#RK00391, 56M and photos.

Best regards, Polo/Sovann

## Rattanakiri Provincial Hospital Telemedicine Clinic with Sihanouk Hospital Center of HOPE and Center for Connected Health



Patient: LP#RK00391, 56M (O Rormeat Village, LBS)

Chief Complaint: Fever and Chill x 14 days

**HPI:** 56M, farmer, with history of malaria (unknown type), 2+ on microscopy and was treated with Antimalaria drug for 5 days then the symptoms gone. One month later, he presented with fever, chill, which he noticed occurred every other day. It also associated with left temporal throbbing headaches, anorexia, muscle and joints pain. He got treatment from local private clinic with IV fluid infusion and oral medicine (unknown name) bid for 10days, his fever still persist so he went to provincial hospital and admitted to medical department, diagnosed with pharyngitis and dengue fever. He was

treated with NSS infusion, Amoxicillin 500mg 2t bid, Paracetamol 500mg 2t tid, Multivitamin 1t bid for 3 days but his fever still persist. During these two weeks, he denied of ear pain, ringing, sore throat, runny nose, nasal congestion, cough, SOB, chest pain, abd pain, nausea, vomiting, diarrhea, bloody/mucus stool, dysuria, hematuria, oliguria, edema, skin rash.

**PMH/SH:** Surgical removal of explosive fragment in left temporal area in 1993 (he was former soldier); no HTN, no diabetes, no heart/pulmonary disease

## Family Hx: None

**Social Hx**: Smoking 2pack of cig per day for over 30y; casual EtOH

## **Medication:**

- 1. NSS infusion 1000ml/d
- 2. Amoxicillin 500mg 2t bid
- 3. Paracetamol 500mg 2t tid
- 4. Multivitamin 1t bid

Allergies: NKDA

ROS: Unremarkable

## PE:

## Vital Signs:

On September 15, 2012,	BP: 120/70	P: 86	T: :	38°C			
On September 16, 2012,	BP: 120/70	P: 90	T: :	39°C			
On September17, 2012,	BP: 110/68	P: 93	T: 4	40°C			
On September18, 2012,	BP: 115/69	P: 79	RR: 22	T: 36°C	Wt: 55kg	O2sat: 98%	

General: Look sick, no tachycardia



**HEENT:** Erythema pharynx, no pus, no lesion, no cervical lymph nodes palpable, pink conjunctiva, no thyroid enlargement, no JVD

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

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

**Extremities/Skin:** No legs edema, no lesion, (+) dorsalis pedis and posterior tibial pulse, no foot wound

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

## Lab/Study:

-	15/9/2012	17/9/2012	18/9/2012
Malaria smear	Negative	Negative	Negative
WBC	5400	6000	7900
Ht	40%	36%	
Hb		12	
Plt	136000	158000	

On September 18, 2012 U/A: normal CXR attached

## On September 19, 2012

Tot Chole= 90		[<200]
Creati	inine=1.1	[0.6 – 1.1]
K+	=3.4	[3.5 – 5.5]
AST	= <mark>177</mark>	[<37]
ALT	= <mark>49</mark>	[<42]
RPR	= negative	
HBsA	g= negative	
HCV /	Ab= negative	

## Assessment:

- 1. Pharyngitis
- 2. Pneumonia
- 3. PTB??
- 4. Malaria (Vivax)??

## Plan:

- 1. Erythromycin 500mg 1t bid for 10d
- 2. Paracetamol 500mg 1t po qid
- 3. Multivitamin 1t bid
- 4. AFB smear and malaria smear

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

## Examined by: Nurse Sovann Peng

Date: September 19, 2012

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

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No answer replied

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

Date: Wed, Sep 19, 2012 at 5:20 PM Subject: Rattanakiri TM Clinic September 2012, Case#3, CA#RK00392, 47M To: Joseph Kvedar <jkvedar@partners.org>, Chau Rithy <chaurithy@gmail.com>, Kruy Lim <kruylim@yahoo.com>, "Kathleen M. Kelleher" <kfiamma@partners.org>, "Paul J. M.D. Heinzelmann" <paul.heinzelmann@gmail.com> Cc: Bernie Krisher <berkrish@gmail.com>, Noun SoThero <thero@cambodiadaily.com>, Ed & Laurie Bachrach <lauriebachrach@yahoo.com>

Dear all,

This is case number 3, CA#RK00392, 47M and photo.

Best regards, Polo/Sovann

## Rattanakiri Provincial Hospital Telemedicine Clinic with Sihanouk Hospital Center of HOPE and Center for Connected Health



## Patient: CA#RK00392, 47M (Village III, LBS)

Chief Complaint: Extremities numbness x 2months

**HPI:** 47M, in the past five months, had blurred vision and consulted with ophthalmologist and suggest to have blood test done with result blood sugar 260mg/dl and diagnosed diabetes. He was treated with Metformin 500mg 1t bid and Glibenclamide 5mg 1t bid and following blood sugar check FBS: 90 – 140mg/dl. In these two months, he developed numbness of hands and feet, dizziness and neck tension. He denied of fever, cough, SOB, chest pain, GI complaint, oliguria, hematuria, edema, and foot wound.

**PMH/SH:** Unremarkable

Family Hx: Sister with diabetes, and HTN

Social Hx: Smoking 5cig/d for over 10y, Drinking beer 5cans per day

## **Medication:**

- 1. Metformin 500mg 1t po bid
- 2. Glibenclamide 5mg 1t po bid

## Allergies: NKDA

**ROS:** no trauma, no HA, no ear discharge, no hearing loss, no sore throat

## PE:

Vital Signs: BP: 125/94 P: 89 RR: 20 T: 37°C Wt: 78kg

General: Look stable

**HEENT:** No oropharyngeal lesion, pink conjunctiva, no thyroid enlargement, no neck lymph nodes palpable, no JVD

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

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

**Extremities/Skin:** No legs edema, no lesion, no foot wound, (+) dorsalis pedis and posterior tibial pulse

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

## Lab/Study:

FBS: 142mg/dl U/A: no protein,no glucose, no blood

## Assessment:

1. DMII with PNP

## Plan:

- 1. Metformin 500mg 2t po bid
- 2. Glibenclamide 5mg 1/2t po bid
- 3. Captopril 25mg 1/4t po bid
- 4. Amitriptyline 25mg 1/4t po qhs
- 5. Educate on diabetic diet, do regular exercise and foot care
- 6. Draw blood for Lyte, Creat, Glucose and HbA1C at SHCH

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

# Examined by: Miss Lam Srey Aun (medical student)/Nurse Sovann Peng Date: September 19, 2012

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

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From: **Cusick, Paul S.,M.D.** <PCUSICK@partners.org> Date: Fri, Sep 21, 2012 at 6:14 PM Subject: RE: Rattanakiri TM Clinic September 2012, Case#3, CA#RK00392, 47M To: "Fiamma, Kathleen M." <KFIAMMA@partners.org>, "kirihospital@gmail.com" <kirihospital@gmail.com> Cc: "rithychau@sihosp.org" <rithychau@sihosp.org>

Thank you for this consult.

With a patient like this with progressive upper and lower extremity paresthesias, there are many possibilities for his numbness.

He could have cervical spine disease (stenosis or disc disease) that could cause upper and lower extremity paresthesias. Your history does not indicate radicular pain to suggest cervical disc disease.

He could have peripheral neuropathy from diabetes. He could have peripheral neuropathy from alcohol abuse.

controlling his diabetes with diet and exercise and medications is the best way to limit diabetic neuropathy. The tricyclic amitryptilline is a good drug to treat neuropathic pain. He needs to stop alchohol as this will make controlling his diabetes more difficult and will continue to put him at risk for further neuropathy.

Good luck Paul Cusick

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

Date: Wed, Sep 19, 2012 at 5:22 PM

Subject: Rattanakiri TM Clinic September 2012, Case#4, SK#RK00393, 17M

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

Cc: Bernie Krisher <berkrish@gmail.com>, Noun SoThero <thero@cambodiadaily.com>, Ed & Laurie Bachrach <lauriebachrach@yahoo.com>

Dear all,

This is case number 4, SK#RK00393, 17M and photo.

Best regards, Polo/Sovann

## Rattanakiri Provincial Hospital Telemedicine Clinic with Sihanouk Hospital Center of HOPE and Center for Connected Health



Patient: SK#RK0039, 17M (Kam Village, O Chum)

Chief Complaint: Fever and HA x 10d

**HPI:** 17M presented with symptoms of fever, chill and frontal HA, poor appetite and fatigue, but denied of sore throat, cough, chest pain, ear discharge, ear pain, abdominal pain, bloody/mucus stool, oliguria, dysuria, hematuria, skin rash/lesion. He got treatment from local health care worker with unknown name medicine for about 1w but the fever still persisted so his family brought him to referral hospital. On arrival to hospital he still presented with fever, HA, neck tension, back pain and confusion with visual hallucination, hearing loss and was treated

with Ampicillin, Cotrimoxazole, Metronidazole and Paracetamol.

PMH/SH: Malaria infection three times in the past with complete treatment

Family Hx: None

Social Hx: No cig smoking, casually EtOH

## **Medication:**

- 1. Ampicillin
- 2. Cotrimoxazole
- 3. Metronidazole
- 4. Paracetamol

Allergies: NKDA

**ROS:** Unremarkable

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Vital Signs:	BP: 100/54	P: 83	RR: 26	T: 39C	Wt: kg
That Orgino.	DI : 100/04	1.00	1111. 20	1.000	

General: Look sick, oriented x 3

**HEENT:** Erythema of oropharyngeal, no lesion, pink conjunctiva, no thyroid enlargement, no neck lymph nodes palpable, neck stiffness (positive Brudzinski sign); auditory canal mucus is erythema with pain while inserting the speculum, no exudates, no pustule

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

Abdomen: Soft, no distensión, generalizad abdominal tenderness, (+) BS, no HSM, no surgical scar

**Extremities/Skin:** No legs edema, no lesion, (+) dorsalis pedis and posterior tibial pulse, no foot wound

## **MS/Neuro:**

Brudzinski sign positive Kernig's sign positive Barbinski negative No focal neurological sign

## Lab/Study:

	September 14, 2012	September 18, 2012
Malaria smear:	Negative	Negative
WBC:	144000/mm3	8300
RBC:	592000/mm3	
Hemoglobin:	16.4g/dl	
Hematocrit:	47%	34%
Platelete:	153000	307000
Eosinophil:	0.4%	2%
Neutrophil:	66%	46%
Lymphocyte:	28%	50%
Monocyte:	2%	2%

## **Cerebrospinal fluid result**

WBC: 36400 Neutrophil: 31 Lymphocyte: 59 Glucose: 50mg/dl Protein: 14.8mg/dl LDH: 1434 U/L

Gram stain: moderate lymphocyte, and some neutrophil but could not see any meningococcus

Finger stick blood sugar: 104mg/dl

## Assessment:

1. Meningitis

## Plan:

- 1. Ceftriaxone 2g IV bid for 7d then change to oral
- 2. Paracetamol 300mg IM qid
- 3. IV fluid 2000ml per day

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

# Examined by: Miss Lam Srey Aun (medical student)/Nurse Sovann Peng Date: September 19, 2012

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

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From: **Cusick, Paul S.,M.D.** <PCUSICK@partners.org> Date: Fri, Sep 21, 2012 at 6:35 PM Subject: RE: Rattanakiri TM Clinic September 2012, Case#4, SK#RK00393, 17M To: "Fiamma, Kathleen M." <KFIAMMA@partners.org>, "kirihospital@gmail.com" <kirihospital@gmail.com> Cc: "rithychau@sihosp.org" <rithychau@sihosp.org>

Thank you for this consult.

Your clinical description, exam and the CSF studies are consistent with meningitis.

The treatment needs to be directed at bacterial sources and supportive care.

The CSF culture is important to guide treatment choices, but you need to interpret the culture with some skepticism since the patient has alreday been treated with ampicillin, cotrimoxazole and metronidazole.

It does not appear that this is cerebral malaria.

There are many empiric antibiotic regimens to choose from for the treatment of bacterial meningitis In the United States the most common bacterial causes would be :

In a United States surveillance study performed by the Centers for Disease Control and Prevention via the Emerging Infections Program Network, between 2003 and 2007, 1083 cases of bacterial meningitis were reported in adults; S. pneumoniae was responsible for 71 percent of cases, Neisseria meningitidis for 12 percent, group B streptococcus for 7 percent, Haemophilus influenzae for 6 percent, and Listeria monocytogenes for 4 percent [21].

Therefore, initial choice of antibiotics require antibiotics with good CSF penetration without delay that will penetrate the CSF There are many possible regimens for empiric treatment of bacterial meningitis

One common regimen is ceftriaxone 2gm IV bid and Vancomycin 1gm IV bid.

Your patient has had a decrease in his peripheral WBC by your tests. The decision to add Vancomycin or other antibiotic (for example ampicillin for possible Listeria infection) will depend on the culture results and his clinical response.

Good luck

Paul Cusick

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

Date: Wed, Sep 19, 2012 at 5:26 PM

Subject: Rattanakiri TM Clinic September 2012, Case#5, KL#RK00394, 49M

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

Cc: Bernie Krisher <berkrish@gmail.com>, Noun SoThero <thero@cambodiadaily.com>, Ed & Laurie Bachrach <lauriebachrach@yahoo.com>

Dear all,

This is the case number 5, KL#RK00394, 49M and photo. Please reply to the cases before Thursday afternoon because the patients will come to get the treatment at that time.

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 Center for Connected Health



Patient: KL#RK00394, 49M (Veun Sai)

Chief Complaint: Polyuria, and Polydypsia x 1year

**HPI:** 49M, farmer, presented with symptoms of polyuria, polydypsia, fatigue and weight loss about 10kg/6months, he never had medical consultation or any treatment until in the last two months, he developed numbness of extremity and SOB on exertion (walking and working). He went to referral hospital and admitted to medical department and diagnosed with Pnuemonia, treated with antibiotic for 1w then his SOB became less but he still had polyuria, polydypsia and fatigue, blood sugar checked with result 500mg/dl. He was diagnosed with diabetes and was

treated with Glibenclamide 5mg 1t po bid for three days then the blood sugar still more than 400mg/dl so it was switched to Insulin 10IU qd and blood sugar today 331mg/dl

PMH/SH: no HTN, no DMII, no past surgery

Family Hx: None

Social Hx: Smoking 10cig/d, casually EtOH

**Medication:** 

1. Insulin 10IU qd

Allergies: NKDA

ROS: Unremarkable

PE:

Vital Signs: BP: 102/82 P: 93 RR: 24 T: 36.9°C Wt: 33kg

General: Look sick

**HEENT:** Dryness of Buccal mucus membrane and skin, No oropharyngeal lesion, pink conjunctiva, no thyroid enlargement, no neck lymph nodes palpable, no JVD, no neck stiffness

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

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

**Extremities/Skin:** No legs edema, no lesion, (+) dorsalis pedis and posterior tibial pulse, no foot wound

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

## Lab/Study:

Lab test Blood sugar: 530mg/dl Creatinine: 0.8 [0.5 – 1.1] U/A: glucose 4+, no blood, no protein

## Assessment:

1. DMII

## Plan:

- 1. Continue Insulin 10IU qd
- 2. Educate on diabetic diet, do regular exercise and foot care
- 3. Draw blood for Creat, Glucose and HbA1C at SHCH

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

## Examined by: Dr. Lok Vanthan

Date: September 19, 2012

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

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From: **chaurithy** <rithychau@sihosp.org> Date: Thu, Sep 27, 2012 at 9:41 AM Subject: RE: Treatment plan for Rattanakiri Telemedicine Clinic September 2012 To: kirihospital@gmail.com Cc: Sovann Peng <sovannpeng@sihosp.org>, varine\_menh@yahoo.com

Dear Polo and Dr. Van Thorn,

KL#RK00394, 49M (Veun Sai)

Diagnosis:

1. DMII

Treatment:

1. Continue Insulin 10IU tid

- 2. Educate on diabetic diet, do regular exercise and foot care
- 3. Draw blood for Creat, Glucose and HbA1C at SHCH

Lab result on September 20, 2012		
Creat	=56	[53 - 97]
Gluc	=29.0	[4.1 - 6.1]
HbA10	C =14.5	[4.8 - 5.9]

I called Dr. Van Thorn yesterday and told him that he can change the way he gave insulin (10 IU) every meal time 3x/day to 2/3 in the AM (20 IU) and 1/3 in the evening (10IU) and continue to check his BS 2hrs post-prandial (after meal) until the blood sugar is more controlled 160-180mg/dL and preferably less than 160mg/dL. If not yet controlled, he can increase insulin slowly (5 IU at a time) after every 2-3 days of each increment.

I am cc: Dr. Rin (SHCH DM specialist) also because she would be the best person to give us better advice on DM management of this patient.

Best Regards,

Rithy

Rithy Chau, MPH, MHS, PA-C

Director Telemedicine/EHC Officer

Sihanouk Hospital Center of HOPE

From: **varine Menh** <varine\_menh@yahoo.com> Date: Thu, Sep 27, 2012 at 10:20 AM Subject: RE: Treatment plan for Rattanakiri Telemedicine Clinic September 2012 To: kirihospital@gmail.com, chaurithy <rithychau@sihosp.org> Cc: Sovann Peng <u>sovannpeng@sihosp.org</u>

Dear All,

I would like to ask for insulin'type, if you use long acting insulin may we need morning and evening dose premeal, but if you use short acting insulin may need 3 times pre meals. the dose 2/3 of long acting in morning and 1/3 in evening, and increase slowly, according to blood sugar result, Best regard, RIN

From: **chaurithy** <rithychau@sihosp.org> Date: Fri, Sep 28, 2012 at 8:53 AM Subject: RE: Treatment plan for Rattanakiri Telemedicine Clinic September 2012 To: varine Menh <varine\_menh@yahoo.com> Cc: Sovann Peng <sovannpeng@sihosp.org>, kirihospital@gmail.com

Dear Dr. Rin,

Thank you for your advice on this patient.

Dr. Van Thorn is using Insulatard and dosed as advised 2/3 AM and 1/3 PM premeal. His sugar 2hrs postprandial was 191mg/dL yesterday. He will use the same dose for few more days, if still high, then he can increase slowly.

Any advice to manage this patient better is always welcome. Again, thank you for your participation and support for TM program.

Best Regards, Rithy

## Rithy Chau, MPH, MHS, PA-C

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# Thursday, September 20, 2012

## Follow-up Report for Rattanakiri TM Clinic

There were 5 new patients seen during this month TM clinic at Rattanakiri Referral Hospital (RRH). The data of 5 cases was transmitted and received replies from both Phnom Penh and Boston, and other 19 patients came for brief consult and refill medication only, and other 10 new patients seen by PA Rithy for minor problem without sending data. 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 2012**

## 1. CS#RK00390, 51F (Village I, LBS)

Diagnosis:

- 1. DMII
- 2. HTN
- 3. Lichen dermatitis
- 4. Obesity

### Treatment:

- 1. Metformin 500mg 2t po bid (buy)
- 2. Captopril 25mg 1t po bid (buy)
- 3. Amlodipine 10mg 1/2t po bid (buy)
- 4. HCTZ 25mg 1t po qd (#100)
- 5. Educate on diabetic diet, regular exercise and foot care
- 6. Draw blood for BUN, Creat, glucose, Tot chole, TG and HbA1C at SHCH

#### Lab result on September 20, 2012

BUN	=7.4	[0.8 - 3.9]
Creat	=79	[44 - 80]
Gluc	= <mark>12.5</mark>	[4.1 - 6.1]
T. Chol	= <mark>6.0</mark>	[<5.7]
TG	= <mark>2.9</mark>	[<1.71]
HbA1C	= <mark>8.59</mark>	[4.8 – 5.9]

#### Recommendation after blood test resulted: Keep the same treatment

#### 2. LP#RK00391, 56M (O Rormeat Village, LBS)

#### **Diagnosis:**

- 1. Pharyngitis
- 2. Pneumonia
- 3. PTB??

#### Treatment:

- 1. Erythromycin 500mg 1t bid for 10d (#20)
- 2. Paracetamol 500mg 1t po qid (#30)
- 3. Multivitamin 1t bid (#60)
- 4. AFB smear and malaria smear

#### 3. CA#RK00392, 47M (Village III, LBS)

#### **Diagnosis:**

1. DMII with PNP

#### Treatment:

- 1. Metformin 500mg 2t po bid (#100)
- 2. Glibenclamide 5mg 1/2t po bid (buy)
- 3. Captopril 25mg 1/4t po bid (buy)
- 4. Amitriptyline 25mg 1/4t po qhs (#25)
- 5. Educate on diabetic diet, do regular exercise and foot care
- 6. Draw blood for Lyte, Creat, Glucose and HbA1C at SHCH

#### Lab result on September 20, 2012

Na	=138	[135 - 145]
K	=4.1	[3.5 - 5.0]
CI	=102	[95 - 110]
Creat	=70	[53 - 97]
Gluc	= <mark>6.5</mark>	[4.1 - 6.1]
HbA1C	=5.4	[4.8 – 5.9]

#### Recommendation after blood test resulted: keep the same treatment

#### 4. SK#RK00393, 17M (Kam Village, O Chum) Diagnosis:

#### Diagnosis:

1. Meningitis

#### Treatment:

- 1. Ceftriaxone 2g IV bid for 7d then change to oral
- 2. Paracetamol 300mg IM qid
- 3. IV fluid 2000ml per day

#### 5. KL#RK00394, 49M (Veun Sai)

Diagnosis:

1. DMII

#### Treatment:

- 1. Insulin 20IU qAM and 10IU qPM
- 2. Educate on diabetic diet, do regular exercise and foot care
- 3. Draw blood for Creat, Glucose and HbA1C at SHCH

#### Lab result on September 20, 2012

Creat	=56	[53 - 97]
Gluc	= <mark>29.0</mark>	[4.1 - 6.1]
HbA1C	;	[4.8 – 5.9]

Recommendation after blood test resulted: Give insulin as above treatment then adjust accordingly

#### Patients who come for brief consult and refill medication

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

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

#### Treatment:

- 1. Atenolol 50mg 1t po bid (#200)
- 2. HCTZ 25mg 2t po qd (#50)
- 3. Captopril 25mg 1t po bid (buy)
- 4. Glibenclamide 5mg 1t po bid (buy)
- 5. Metformin 500mg 1t po bid (#100)
- 6. Draw blood for Glucose, HbA1C at SHCH

#### Lab result on September 20, 2012

Gluc	= <mark>12.2</mark>	[4.1 - 6.1]
HbA1C	= <mark>8.8</mark>	[4.8 – 5.9]

Recommendation after blood test resulted: Keep the same treatment, review diabetic diet and exercise

#### 2. KY#RK00069, 61F (Village III)

- Diagnosis:
  - 1. DMII with PNP

#### Treatment:

- 1. Glibenclamide 5mg 1t po bid (buy)
- 2. Metformin 500mg 2t po bid (buy)
- 3. Captopril 25mg 1/2t po bid (buy)
- 4. ASA 300mg 1/4t po qd (#25)
- 5. Draw blood for Creatinine, Glucose, Tot chole, Electrolyte, Protein, Albumin, HbA1C at SHCH

#### Lab result on September 20, 2012

Na	= <mark>130</mark>	[135 - 145]
K	=4.8	[3.5 - 5.0]
CI	=97	[95 - 110]
Creat	=75	[44 - 80]
Gluc	= <mark>12.4</mark>	[4.1 - 6.1]
T. Chol	=4.8	[<5.7]
Protein	=80	[66 – 87]
Albu	=45	[38 – 51]
HbA1C	= <mark>10.25</mark>	[4.8 – 5.9]

Recommendation after blood test resulted: Keep the same treatment, review diabetic diet and exercise

#### 3. EB#RK00078, 41F (Village IV), KON MOM

Diagnosis:

- 1. CHF
- 2. Incompleted RBBB

#### **Treatment:**

- 1. Captopril 25mg 1/2t po qd (buy)
- 2. Digoxin 0.25mg 1t po qd (#100)
- 3. Spironolactone 25mg 1t po bid (#130)

## 4. SP#RK00081, 58F (Village III, LBS)

- Diagnosis:
  - 1. HTN
  - 2. DMII
  - 3. Liver cirrhosis

#### Treatment:

- 1. Glibenclamide 5mg 1t po bid (buy)
- 2. Metformin 500mg 1t po bid (#100)
- 3. Amlodipine 5mg 1t po qd (buy)
- 4. Spironolactone 25mg 1t po bid (#130)
- 5. Propranolol 40mg 1/4t po bid (#30)

#### 5. OT#RK00155, 45F (Bor Keo)

#### **Diagnosis:**

- 1. HTN
- 2. DMII
- 3. Hyperlipidemia

#### Treatment:

- 1. Metformin 500mg 2t po bid (#200)
- 2. Captopril 25mg 1t po bid (#buy)
- 3. Atenolol 50mg 1/2t po bid (#50)
- 4. ASA 300mg <sup>1</sup>/<sub>4</sub>t po gd (#25)
- 5. Amitriptylin 25mg 1/2t po ghs (buy)
- 6. Insulin NPH 23UI gAM and 5UI gPM (buy)
- 7. Simvastatin 10mg 1t po ghs (buy)
- 8. Draw blood for Glucose, HbA1C at SHCH

#### Lab result on September 20, 2012

Gluc	= <mark>9.3</mark>	[4.1 - 6.1]
HbA1C	= <mark>9.9</mark>	[4.8 – 5.9]

Recommendation after blood test resulted: Keep the same treatment, review diabetic diet and exercise 6. SV#RK00256, 43M (Village I)

### Diagnosis:

- 1. DMII
- 2. HTN
- 3. Hypertriglyceridemia

#### **Treatment:**

- 1. Glibenclamide 5mg 1t po bid (buy)
- 2. Metformin 500mg 2t po bid (#100)
- 3. Captopril 25mg 1/2t po bid (buy)
- 4. Draw blood for Glucose, HbA1C at SHCH

#### Lab result on September 20, 2012

Gluc	= <mark>7.9</mark>	[4.1 - 6.1]
HbA1C	= <mark>10.6</mark>	[4.8 – 5.9]

#### Recommendation after blood test resulted: Keep the same treatment, review diabetic diet and exercise

#### 7. KC#RK00260, 44F (Village V) Diagnosis:

1. DMII

#### **Treatment:**

- 1. Metformin 500mg 1t po bid (#100)
- 2. Captopril 25mg 1/4t po bid (buy)

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

- Diagnosis:
  - 1. DMII
  - 2. HTN

#### Treatment:

- 1. Metformin 500mg 2t po qAM and 3t qPM (#100)
- 2. Glibenclamide 5mg 2t po bid (buy)
- 3. Captopril 25mg 1/2t po bid (buy)
- 4. ASA 300mg 1/4t po qd (#25)
- 5. Draw blood for Glucose, HbA1C at SHCH

#### Lab result on September 20, 2012

Gluc =	<mark>15.3</mark>	[4.1 - 6.1]
HbA1C =	<mark>11.3</mark>	[4.8 – 5.9]

#### Recommendation after blood test resulted: Keep the same treatment, review diabetic diet and exercise

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

#### **Diagnosis:**

- 1. DMII
- 2. HTN

#### Treatment:

- 1. Glipizide 10mg 1/2t po bid (#100)
- 2. Metformin 500mg 2t po bid (#100)
- 3. Captopril 25mg 1/2 tab bid (buy)
- 4. ASA 300mg 1/4t po qd (#25)
- 5. Draw blood for Glucose, HbA1C at SHCH

#### Lab result on September 20, 2012

Gluc	= <mark>15.6</mark>	[4.1 - 6.1]
HbA1C	= <mark>10.0</mark>	[4.8 – 5.9]

Recommendation after blood test resulted: Keep the same treatment, review diabetic diet and exercise

#### 10. SH#RK00311, 57F (Dey Lo Village)

#### **Diagnosis:**

1. DMII

#### Treatment:

- 1. Glibenclamide 5mg 1t po bid (buy)
- 2. Draw blood for Creat, Glucose, HbA1C at SHCH

#### Lab result on September 20, 2012

Creat	=47	[44 – 80]
Gluc	= <mark>14.0</mark>	[4.1 - 6.1]
HbA1C	= <mark>15.9</mark>	[4.8 – 5.9]

#### Recommendation after blood test resulted: Add Metformin 500mg 1t po bid, review diabetic diet and exercise

#### 11. CT#RK00318, 31F (Village I)

- Diagnosis:
  - 1. DMII

#### Treatment:

- 1. Metformin 500mg 2t po bid (buy)
- 2. Glyburide 2.5mg 1t po bid (#200)
- 3. Draw blood for Creat, Glucose, HbA1C at SHCH

#### Lab result on September 20, 2012

Creat	=41	[44 – 80]
Gluc	= <mark>8.4</mark>	[4.1 - 6.1]
HbA1C	= <mark>9.2</mark>	[4.8 – 5.9]

Recommendation after blood test resulted: Increase Metformin 500mg 3t qAM and 2t qPM, review diabetic diet and exercise

## 12. TS#RK00320, 51M (Village V)

#### Diagnosis:

- 1. DMII
- 2. HTN

#### Treatment:

- 1. Glipizide 10mg 1t po bid (#200)
- 2. Metformin 500mg 2t po bid (#100)
- 3. Captopril 25mg 1/2t po bid (buy)
- 4. Draw blood for Glucose, HbA1C at SHCH

#### Lab result on September 20, 2012

Gluc	= <mark>8.3</mark>	[4.1 - 6.1]
HbA1C	= <mark>9.4</mark>	[4.8 – 5.9]

Recommendation after blood test resulted: Keep the same treatment, review diabetic diet and exercise

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

- Diagnosis:
  - 1. DMII
  - 2. HTN
  - 3. Hyperlipidemia

#### Treatment:

- 1. Metformine 500mg 1t po bid (buy)
- 2. Glipizide 10mg 1t po bid (#200)
- 3. Atenolol 50mg 1/2t po qd (#50)
- 4. Captopril 25mg 1/2t po bid (buy)
- 5. Amitriptylin 25mg 1/4t po qhs (buy)
- 6. Draw blood for Glucose, HbA1C at SHCH

#### Lab result on September 20, 2012

Gluc	= <mark>7.3</mark>	[4.1 - 6.1]
HbA1C	= <mark>7.4</mark>	[4.8 – 5.9]

Recommendation after blood test resulted: Keep the same treatment, review diabetic diet and exercise

#### 14. LV#RK00369, 55F (Village I, LBS)

**Diagnosis:** 

1. DMII with PNP

#### **Treatment:**

- 1. Metformin 500mg 2t po bid (#100)
- 2. Glyburide 2.5mg 2t po bid (#400)
- 3. Amitriptyline 25mg 1/4t po qd (#25)
- 4. Draw blood for Glucose, HbA1C at SHCH

#### Lab result on September 20, 2012

Gluc	= <mark>13.6</mark>	[4.1 - 6.1]
HbA1C	= <mark>10.8</mark>	[4.8 – 5.9]

Recommendation after blood test resulted: Keep the same treatment, review diabetic diet and exercise

#### 15. HS#RK00370, 47F (Village I, LBS) **Diagnosis:**

- - 1. DMII 2. HTN
  - 3. Renal insufficiency
  - 4. Hyperlipidemia

## Treatment:

- 1. Metformin 500mg 2t qAM and 1t qPM (#100)
- 2. Glyburide 2.5mg 2t po bid (#400)
- 3. Captopril 25mg 1/2t po bid (buy)
- 4. Amlodipine 5mg 1t po qd (buy)
- 5. Fenofibrate 100mg 1t po bid (buy)
- 6. Draw blood for Creatinine, Glucose, Electrolyte, HbA1C at SHCH

#### Lab result on September 20, 2012

Na	=137	[135 - 145]
K	=3.9	[3.5 - 5.0]
CI	=104	[95 - 110]
Creat	= <mark>219</mark>	[44 - 80]
Gluc	= <mark>8.8</mark>	[4.1 - 6.1]
HbA1C	= <mark>8.35</mark>	[4.8 – 5.9]

Recommendation after blood test resulted: Keep the same treatment, review diabetic diet and exercise

#### 16. NK#RK00371, 69F (Thmey Village, LBS) **Diagnosis:**

## 1. DMII

#### Treatment:

- 1. Metformin 500mg 1t po bid (#100)
- 2. Captopril 25mg 1/4t po bid (buy)
- 3. Draw blood for Creatinine, Glucose, HbA1C at SHCH

#### Lab result on September 20, 2012

Creat	=72	[44 – 80]
Gluc	= <mark>9.0</mark>	[4.1 - 6.1]
HbA1C	= <mark>6.0</mark>	[4.8 – 5.9]

Recommendation after blood test resulted: Keep the same treatment, review diabetic diet and exercise

## 17. SC#RK00374, 55F (Sayos, Kaleng, Lumphat)

- Diagnosis:
  - 1. DMII 2. HTN
  - . HIN

#### Treatment:

- 1. Metformin 500mg 2t qAM and 1t qPM (#100)
- 2. Glibenclamide 5mg 1t po bid (buy)
- 3. Captopril 25mg 1/2t po bid (buy)

# 18. KL#RK00383, 58F (Village V, LBS) Diagnosis:

1. DMII

#### Treatment:

- 1. Glibenclamide 5mg 1t po qd (buy)
- 2. Draw blood for Glucose, HbA1C

## Lab result on September 20, 2012

Gluc	=5.9	[4.1 - 6.1]
HbA1C	= <mark>4.3</mark>	[4.8 – 5.9]

Recommendation after blood test resulted: Hold on Glibenclamide, keep diabetic diet and exercise and recheck in next follow up

## 19. SS#RK00384, 44F (Village I, LBS)

Diagnosis:

1. HTN

## Treatment:

1. Amlodipine 5mg 1t po qd (#50)

## The next Rattanakiri TM Clinic will be held in December 2012