Robib and Telemedicine

October 2002 Telemedicine Clinic in Robib

Report and photos submitted by David Robertson

On Thursday, October 24, 2002, Sihanouk Hospital Center of Hope nurse Koy Somontha gave the monthly Telemedicine examinations at the Robib Health Clinic. David Robertson transcribed examination data and took digital photos, then transmitted and received replies from several Telepartners physicians in Boston and from the Sihanouk Hospital Center of Hope (SHCH) in Phnom Penh. Data was transmitted via the Hironaka School Internet link.

The following day, all patients returned to the Robib Health Clinic. Nurse "Montha" discussed advice received from the physicians in Boston and Phnom Penh with the patients.

Following are the e-mail, digital photos and medical advice replies exchanged between the Telemedicine team in Robib, Telepartners in Boston, and the Sihanouk Hospital Center of Hope in Phnom Penh:

Date: Wed, 23 Oct 2002 04:17:19 -0700 (PDT)
From: David Robertson <davidrobertson1@yahoo.com>
Subject: Reminder, Cambodia Telemedicine, 24 October 2002
To: JKVEDAR@PARTNERS.ORG, KKELLEHER@PARTNERS.ORG,
"Gere, Katherine F." <KGERE@PARTNERS.ORG>, ggumley@bigpond.com.kh
Cc: dmr@media.mit.edu, "Kedar, Iris,M.D." <IKEDAR@PARTNERS.ORG>,
Jennifer Hines <sihosp@bigpond.com.kh>, aafc@forum.org.kh,
Bernie Krisher <bernie@media.mit.edu>, telemedicine_cambodia@yahoo.com

Please reply to dmr@media.mit.edu

Hello from Robib, Cambodia.

A quick reminder that the next Telemedicine Clinic in Robib, Cambodia is this Thursday, 24 October 2002. I'll send out the cases in a few batches (hopefully late morning, late afternoon, and in the evening on Thursday, Cambodia time.)

We have the follow-up clinic with the patients on Friday morning (8:00am, 25 October 2002, Robib time.) Best if we could receive your e-mail advice before this time (Thursday, 9:00pm, 24 October 2002, in Boston.)

Thanks again for your help.

Best regards,

David

Date: Wed, 23 Oct 2002 21:30:14 -0700 (PDT)
From: David Robertson <davidrobertson1@yahoo.com>
Subject: patient #1, LENG HAK, Cambodia Telemedicine, 24 October 2002

To: JKVEDAR@PARTNERS.ORG, KKELLEHER@PARTNERS.ORG,
"Gere, Katherine F." <KGERE@PARTNERS.ORG>, ggumley@bigpond.com.kh
Cc: dmr@media.mit.edu, "Kedar, Iris,M.D." <IKEDAR@PARTNERS.ORG>,
Jennifer Hines <sihosp@bigpond.com.kh>, aafc@forum.org.kh,
Bernie Krisher <bernie@media.mit.edu>, telemedicine_cambodia@yahoo.com

Telemedicine Clinic in Robib, Cambodia - 24 October 2002

Patient #1: LENG HAK, male, 67 years old, farmer

Chief complaint: Has headache, dizziness, and blurred vision on and off for last three years.

History of present illness: Three years ago he got headache, dizziness, and blurred vision, developing day to day. These symptoms got better when he took some antihypertension medicine. He got these symptoms accompanied by weakness, neck tenderness and sometimes vomiting. He went back to the local doctor and they gave him some medicine for hypertension but he's still not better so he came to see us.

Current medicine: Nifedipine, 10 mg twice per day for two weeks but he stopped ten days ago.

Past medical history: He got malaria in 1962, but completed treatment with modern medicine.

Social history: Smoked cigarettes and drank alcohol for fifty years, but quit drinking alcohol about two years ago.

Family history: Unremarkable

Allergies: None

Review of system: Has no fever, no cough, no abdominal pain, has headache, has blurred vision, has dizziness, no chest pain, and no dyspepsia.

Physical Exam:

General Appearance: Good
BP: Left: 220/120, **Right:** 230/110
Pulse: 100
Resp.: 20
Temp. : 36.5

Hair, eyes, ears, nose, and throat: Okay.
Neck: No goiter, no lymph node.
Lungs: Clear both sides but decreasing breath sound on left side.
Heart: Regular rhythm, no murmur
Abdomen: Soft, flat, not tender, positive bowel sound, and no HSM.
Limbs: No stiffness, no edema, no joint pain.
Urinalysis: Normal

Assessment: Severe Hypertension.

Recommend: Should we refer him to Kampong Thom for blood tests like creat., lyte, BUN, plus CBC and a chest x-ray?

From: "Graham Gumley" <ggumley@bigpond.com.kh>

To: "'David Robertson'" <davidrobertson1@yahoo.com>

Cc: "'Gary Jacques'" <gjacques@bigpond.com.kh>

Subject: RE: patient #1, LENG HAK, Cambodia Telemedicine, 24 October 2002

Date: Fri, 25 Oct 2002 11:15:42 +0700

Importance: Normal

Apologies for the delayed replies ... multiple reasons.

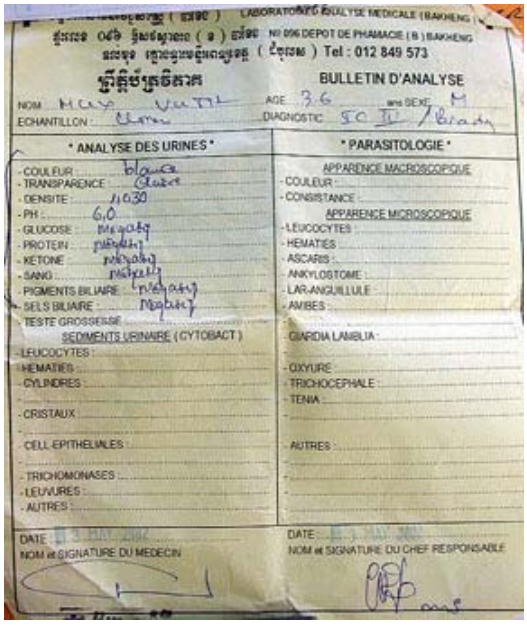
For this patient:

Agree with plan for referral for Hypertension workup.

Date: Wed, 23 Oct 2002 21:33:25 -0700 (PDT)
From: David Robertson <davidrobertson1@yahoo.com>
Subject: patient #2, MUY VUN, Cambodia Telemedicine, 24 October 2002
To: JKVEDAR@PARTNERS.ORG, KKELLEHER@PARTNERS.ORG,
"Gere, Katherine F." <KGERE@PARTNERS.ORG>, ggumley@bigpond.com.kh
Cc: dmr@media.mit.edu, "Kedar, Iris,M.D." <IKEDAR@PARTNERS.ORG>,
Jennifer Hines <sihosp@bigpond.com.kh>, aafc@forum.org.kh,
Bernie Krisher <bernie@media.mit.edu>, telemedicine_cambodia@yahoo.com

Telemedicine Clinic in Robib, Cambodia - 24 October 2002

Patient #2: MUY VUN, male, 36 years old, teacher



BULLETIN D'ANALYSE

NOM: Muy Vun AGE: 36 ans SEXE: M

ECHANTILLON: Urine DIAGNOSTIC: SC II / Urin

* ANALYSE DES URINES *

- COULEUR: blanc
- TRANSPARENCE: Claire
- DENSITE: 1.030
- PH: 6.0
- GLUCOSE: négatif
- PROTEIN: négatif
- KETONE: négatif
- SANG: négatif
- PIGMENTS BILIAIRE: négatif
- SELS BILIAIRE: négatif
- TESTE GROSSESSE

SEDIMENTS URINAIRE (CYTOBACT)

- LEUCOCYTES
- HEMATIES
- CYLINDRES
- CRISTAUX
- CELL.EPITHELIALES
- TRICHOMONASES
- LEUVURES
- AUTRES

DATE

NOM et SIGNATURE DU MEDECIN

* PARASITOLOGIE *

APPARENCE MACROSCOPIQUE

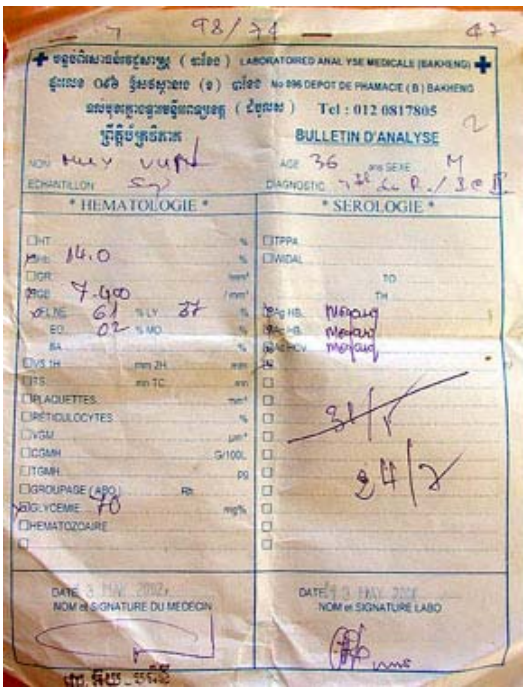
- COULEUR
- CONSISTANCE

APPARENCE MICROSCOPIQUE

- LEUCOCYTES
- HEMATIES
- ASCARIS
- ANKYLOSTOME
- LAR-ANGUILLULE
- AVIBES
- GIARDIA LAMBLIA
- OXYURE
- TRICHOCEPHALE
- TENIA
- AUTRES

DATE

NOM et SIGNATURE DU CHEF RESPONSABLE



LABORATOIRE D'ANALYSE MEDICALE (BAKHENG)
DEPOT DE PHAMACIE (B) BAKHENG
Tel : 012 0817805
BULLETIN D'ANALYSE

98/74

NOM: Huy Vuth
AGE: 36 ans SEXE: M
ECHANTILLON: Sg
DIAGNOSTIC: 728 Lu P./3 e

* HEMATOLOGIE *

HT			%
Hb	14.0		%
GR			/mm³
GB	7.900		/mm³
PNE	61	LY 37	%
EO	02	MO	%
BA			%
VS 1H	mm 2H		mm
TS	mn TC		mn
PLAQUETTES			/mm³
RÉTICULOCYTES			%
VGM			µm³
CCMH			G/100L
TCMH			pg
GROUPAGE (ABO)		Rh	
GLYCEMIE	78		mg%
HEMATOZOAIRE			

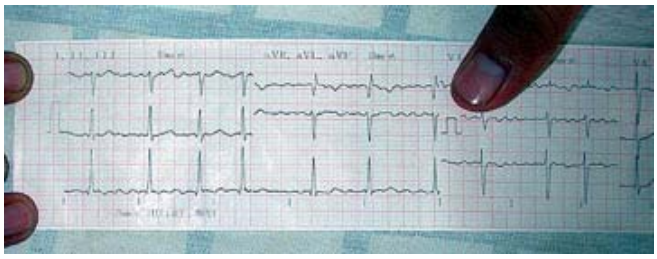
* SEROLOGIE *

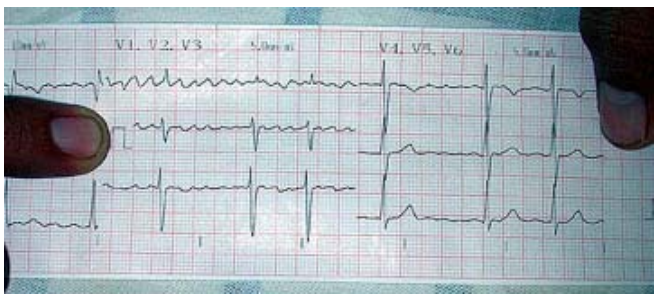
TPPA	
WIDAL	
	TO
	TH
Ag HB	Négatif
Ac HB	Négatif
Ac HCV	Négatif

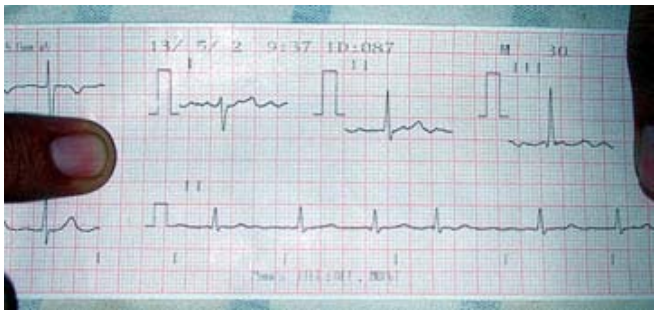
94/8

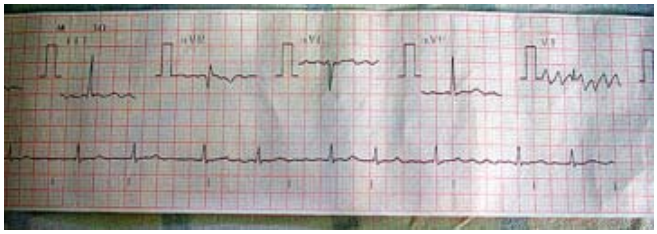
DATE 13 MAY 2002
NOM et SIGNATURE DU MEDECIN

DATE 13 MAY 2002
NOM et SIGNATURE LABO









Chief complaint: Patient has had palpitations and shortness of breath, on and off, for the last eight months.

History of present illness: Eight months ago patient got palpitations and shortness of breath, on and off. Symptoms developed during working and lying down, got better when he took some medicine. When he got these signs he went to Siem Reap to consult with a doctor there who gave him some unknown medication. His condition only got a little bit better so he came to see us. Besides palpitations and shortness of breath, he also has dizziness and sweating.

Current medicine: Used an unknown medication for four months, and stopped one month ago.

Past medical history: Unremarkable

Social history: Drank alcohol and smoked for 18 years but stopped both two years ago.

Family history: Unremarkable

Allergies: None.

Review of system: Has no fever, has a dry cough, no abdominal pain, and no chest pain, has dizziness, has mild dyspepsia.

Physical Exam:

General Appearance: Looks good.
BP: 110/70
Pulse: 80
Resp.: 24
Temp. : 36.5

Hair, eyes, ears, nose, and throat: Okay.
Lungs: Clear both sides.
Heart: Irregular rhythm, no murmur.
Abdomen: Soft, flat, not tender, positive bowel sound, and no HSM.
Limbs: No edema and no joint pain.

EKG: Done in Siem Reap on 13 May 02, shows HR = 66, T invert on Lead V4 and AVR many places on Leads V1, V2, V3 and others not clear. Other, not clear P wave.

Assessment: Atrial Fibrillation secondary to Etio? Valvular heart disease? Left Ventricle hypertrophy?

Recommend: Should we refer him to Kampong Thom for blood tests like creat., lyte, BUN, EKG, plus CBC, a chest x-ray and reevaluation?

From: "Kelleher, Kathleen M. - Telemedicine" <KKELLEHER@PARTNERS.ORG>
To: "'davidrobertson1@yahoo.com'" <davidrobertson1@yahoo.com>,
"'dmr@media.mit.edu'" <dmr@media.mit.edu>
Subject: FW: patient #2, MUY VUN, Cambodia Telemedicine, 24 October 2002
Date: Thu, 24 Oct 2002 17:23:49 -0400

> -----Original Message-----

> From: Mudge, Gilbert Horton,Jr.,M.D.

> Sent: Thursday, October 24, 2002 4:32 PM

> To: Kelleher, Kathleen M. - Telemedicine

> Subject: RE: patient #2, MUY VUN, Cambodia Telemedicine, 24 October

> 2002

>

> I have reviewed the data supplied on the patient below. This includes the

> clinical history, physical exam, CBC, urinalysis, and EKG. The EKG was

> performed on May 13, 2002. The major abnormality noted is on the EKG.

> This reveals atrial flutter-fibrillation, but in addition, also shows

> severe right ventricular hypertrophy. There is extreme right axis

> deviation and a prominent R wave in VI, all consistent with severe right

> ventricular hypertrophy. This pattern of EKG abnormality is most

> consistent with advanced rheumatic mitral stenosis, or perhaps congenital

> heart disease; I suspect the former diagnosis based on EKG alone. The

> patient requires further evaluation with Chest X-ray and echocardiogram.

> Cardiac Catheterization may be required. Although there are few finding on

> physical exam, the EKG abnormalities are sufficiently abnormal to warrant

> full and complete evaluation. Ultimate therapy will depend on the

> echocardiogram findings. Please to not hesitate to contact me if I can be

> of further assistance.

>

From: "Graham Gumley" <ggumley@bigpond.com.kh>

To: "'David Robertson'" <davidrobertson1@yahoo.com>

Cc: "'Gary Jacques'" <gjacques@bigpond.com.kh>

Subject: RE: patient #2, MUY VUN, Cambodia Telemedicine, 24 October 2002

Date: Fri, 25 Oct 2002 11:17:45 +0700

Importance: Normal

SHCH Reply;

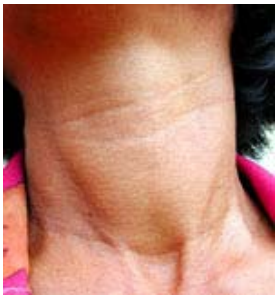
Agree with plan for referral for workup as described.

Graham Gumley.

Date: Thu, 24 Oct 2002 02:33:06 -0700 (PDT)
From: David Robertson <davidrobertson1@yahoo.com>
Subject: patient #3, SOM MAN, Cambodia Telemedicine, 24 October 2002
To: JKVEDAR@PARTNERS.ORG, KKELLEHER@PARTNERS.ORG,
"Gere, Katherine F." <KGERE@PARTNERS.ORG>, ggumley@bigpond.com.kh
Cc: dmr@media.mit.edu, "Kedar, Iris,M.D." <IKEDAR@PARTNERS.ORG>,
Jennifer Hines <sihosp@bigpond.com.kh>, aafc@forum.org.kh,
Bernie Krisher <bernie@media.mit.edu>, telemedicine_cambodia@yahoo.com

Telemedicine Clinic in Robib, Cambodia - 24 October 2002

Patient #3: SOM MAN, female, 51 years old, farmer



Chief complaint: neck tightness and mass on anterior neck for two years.

History of present illness: Two years ago she developed a mass on the anterior neck plus neck tightness. Mass increased in size day to day for two years. She got these symptoms accompanied by difficulty in swallowing, dizziness, and palpitations, so she came to see us.

Current medicine: None.

Past medical history: None.

Social history: No smoking but she's drank small amounts of alcohol on and off for two years.

Family history: Unremarkable

Allergies: None

Review of system: Has no cough, no fever, no abdominal pain, no diarrhea, no dyspepsia, and has dizziness.

Physical Exam:

General Appearance: Looks good
BP: 120/80
Pulse: 88
Resp.: 20
Temp. : 36.5

Hair, eyes, ears, nose, and throat: Okay.
Neck: Has goiter, size 3 x 3 cm, and mobile.
Lungs: Clear both sides.
Heart: Regular rhythm, no murmur
Abdomen: Soft, flat, not tender, and positive bowel sound.
Limbs: A little bit of tremor, no stiffness, no edema, and no joint pain.

Assessment: Hyperthyroidism? Simple goiter?

Recommend: Should we draw blood here for T4, TSH, T3 and send to our hospital? Follow up the test results next trip? Please give me any other ideas.

From: "Kedar, Iris,M.D." <IKEDAR@PARTNERS.ORG>

To: "List, James Frank,M.D.,Ph.D." <JLIST@PARTNERS.ORG>

Cc: 'David Robertson' <davidrobertson1@yahoo.com>,

"Kelleher, Kathleen M. - Telemedicine" <KKELLEHER@PARTNERS.ORG>

Subject: FW: patient #3, SOM MAN, Cambodia Telemedicine, 24 October 2002

Date: Thu, 24 Oct 2002 16:24:54 -0400

Hi Jim,

Thanks for consulting on this case. Please respond to all and your recommendations will be sent to Cambodia.

The website for this project is www.villageleap.com. The site has a telemedicine link with previous cases.

Good luck studying for the boards.

Iris

From: "List, James Frank,M.D.,Ph.D." <JLIST@PARTNERS.ORG>

To: "Kedar, Iris,M.D." <IKEDAR@PARTNERS.ORG>

Cc: "David Robertson' ' <davidrobertson1@yahoo.com>,

"Kelleher, Kathleen M. - Telemedicine" <KKELLEHER@PARTNERS.ORG>

Subject: RE: patient #3, SOM MAN, Cambodia Telemedicine, 24 October 2002

Date: Thu, 24 Oct 2002 17:14:56 -0400

Recommendations:

The patient should have thyroid function tests sent, and, if found to be hyperthyroid, she should be treated medically until definitive therapy can be arranged. She does not sound severely thyrotoxic, so follow-up of results in a couple of weeks to as long as a month or two is acceptable with the caveat that should her symptoms worsen, she would need more immediate attention. It may be helpful to treat the patient with beta-blockers at low dose (e.g. atenolol 25 mg per day) until results are back, on the assumption that she is hyperthyroid.

Comments:

The patient's complaint of palpitations and the finding of tremor are compatible with but not diagnostic of thyrotoxicosis. To establish the diagnosis, a TSH should be sent. If suppressed, T4, T3, and, if available, T3 resin uptake should be added. If the TSH is a first generation test (i.e. if it does not discriminate low normal from suppressed values), then the T4 and T3 should be sent at the same time as the TSH.

If the patient is found to have thyrotoxicosis (low TSH, high T4 and T3), then the likely etiologies in the setting of a goiter for 2 years are toxic nodule(s) or Graves' disease. A T3 to

T4 ratio in excess of 20:1 favors the latter diagnosis. The level of T3 and T4 will also help determine what steps to take next. Usually, antithyroid drugs such as propylthiouricil or methimazole would be given along with beta-blockers to treat the thyrotoxicosis until the patient could have definitive therapy with radioactive iodine or surgery. Often, beta blocker therapy alone will ameliorate the symptoms of mild to moderate hyperthyroidism.

In the setting of a growing neck mass, thyroid carcinoma must also be considered. No nodules were mentioned in the physical examination. If the patient is found not to have thyrotoxicosis, an ultrasound of the neck and biopsy of any large nodules would be helpful here. If any palpable nodules are present, they could be biopsied even without ultrasound evaluation.

An 123I scan and uptake would also be quite helpful in identifying the etiology of hyperthyroidism and in identifying cold nodules (which are more likely to contain cancer).

The described mass does not sound big enough to cause anatomic obstruction of the thoracic inlet; however, there could be significant retrosternal extension, and the patient's dizzyness and neck tightness could represent symptoms of compression. A Pemberton's maneuver may help evaluate this. In this maneuver, the patient raises her hands above her head. Resulting facial flushing is a sign of thoracic inlet obstruction, and an indication for further evaluation - starting with a chest X-ray - and consideration of surgical removal.

James F. List, M.D., Ph.D.

From: "Graham Gumley" <ggumley@bigpond.com.kh>

To: "'David Robertson'" <davidrobertson1@yahoo.com>

Cc: "'Gary Jacques'" <gjacques@bigpond.com.kh>

Subject: RE: patient #3, SOM MAN, Cambodia Telemedicine, 24 October 2002

Date: Fri, 25 Oct 2002 11:19:30 +0700

Importance: Normal

SHCH reply:

Agree with tests as recommended.

Graham Gumley

Date: Thu, 24 Oct 2002 02:40:51 -0700 (PDT)
From: David Robertson <davidrobertson1@yahoo.com>
Subject: patient #4, SOURN VOEUN, Cambodia Telemedicine, 24 October 2002
To: JKVEDAR@PARTNERS.ORG, KKELLEHER@PARTNERS.ORG,
"Gere, Katherine F." <KGERE@PARTNERS.ORG>, ggumley@bigpond.com.kh
Cc: dmr@media.mit.edu, "Kedar, Iris,M.D." <IKEDAR@PARTNERS.ORG>,
Jennifer Hines <sihosp@bigpond.com.kh>, aafc@forum.org.kh,
Bernie Krisher <bernie@media.mit.edu>, telemedicine_cambodia@yahoo.com

Telemedicine Clinic in Robib, Cambodia - 24 October 2002

Patient #4: SOURN VOEUN, female, 52 years old

Chief complaint: Sore mouth for two months. Weakness and

fever on and off for two months.

History of present illness: She has sore throat, weakness, and fever developing from day to day for two months, increased pain in mouth during eating. After that, she went to the local health center, discussed with medical staff, and they gave her antibiotics to take for three days and she stopped taking the medication 10 days ago and came to see us.

Current medicine: Antibiotics for three days, stopped the medication 10 days ago.

Past medical history: Unremarkable

Social history: Does not smoke and does not drink alcohol.

Family history: Unremarkable

Allergies: None

Review of system: Has mild fever, no vomiting, no abdominal pain, has diarrhea, no chest pain, no cough, and no stool with blood.

Physical exam

General Appearance: Looks mildly thin.
BP: 110/60
Pulse: 94
Resp.: 20
Temp. : 36.7

Hair, ears, and nose: Okay.
Eyes: Mild pale but not yellow.
Throat: Pink color, no hypertrophy of tonsil.
Mouth: Has small wound at right upper gum.
Lungs: Clear both sides.
Heart: Regular rhythm, no murmur.
Abdomen: Soft, flat, not tender, and positive bowel sound.
Limbs: Okay.

Assessment: Sore mouth secondary to right upper gum infection. Vitamin deficiency? Parasitis?

Recommend: Should we try Amoxycillin, 500 mg three times daily, for ten days, plus multivitamins, one tablet daily for ten days, and Albendazole, 100mg twice daily for three days? Please give me any other ideas.

From: "Kelleher, Kathleen M. - Telemedicine" <KKELLEHER@PARTNERS.ORG>
To: "'davidrobertson1@yahoo.com'" <davidrobertson1@yahoo.com>,
"'dmr@media.mit.edu'" <dmr@media.mit.edu>
Subject: FW: patient #4, SOURN VOEUN, Cambodia Telemedicine, 24 October 20
02
Date: Thu, 24 Oct 2002 16:03:10 -0400

> -----Original Message-----

> From: Troulis, Maria

> Sent: Thursday, October 24, 2002 4:02 PM

> To: Kelleher, Kathleen M. - Telemedicine

> Subject: RE: patient #4, SOURN VOEUN, Cambodia Telemedicine, 24

> October 2002

>

> I would recommend the amocillin or doxycycline. If no resolution in 48hrs.

> she should be reevaluated at a larger center. Also, if patient is febrile,

> has malaise or other systemic issues- she must be evaluated at larger

> center.

From: "Gary Jacques" <gjacques@bigpond.com.kh>

To: "David Robinson" <dmr@media.mit.edu>

Cc: "Telemedicine Project" <davidrobertson1@yahoo.com>

Subject: pt 4 : Sourn Voeurn

Date: Fri, 25 Oct 2002 12:55:32 +0700

Importance: Normal

Agree you your initial plan. If no relief of fever, send for lab work-up

including malaria smear, CBC ==Gary

Date: Thu, 24 Oct 2002 02:48:13 -0700 (PDT)
From: David Robertson <davidrobertson1@yahoo.com>
Subject: patient #5, CHHOURN EART, Cambodia Telemedicine, 24 October 2002
To: JKVEDAR@PARTNERS.ORG, KKELLEHER@PARTNERS.ORG,
"Gere, Katherine F." <KGERE@PARTNERS.ORG>, ggumley@bigpond.com.kh
Cc: dmr@media.mit.edu, "Kedar, Iris,M.D." <IKEDAR@PARTNERS.ORG>,
Jennifer Hines <sihosp@bigpond.com.kh>, aafc@forum.org.kh,
Bernie Krisher <bernie@media.mit.edu>, telemedicine_cambodia@yahoo.com

Telemedicine Clinic in Robib, Cambodia - 24 October 2002

Patient #5: CHHOURN EART, female, 26 years old, farmer

Chief complaint: Upper abdominal pain for two months.

History of present illness: Two months ago she got upper abdominal pain accompanied by nausea, excessive saliva, pain like cramping in epigastric area radiating to her back. She has increased pain after a meal sometimes and decreased pain after using an antacid given to her by

local medical staff in the village. But her condition is still on and off so she decided to come see us.

Current medicine: None.

Past medical history: One month ago she was admitted to the local Rovieng Health Center for one week. They said she had gastritis.

Social history: Unremarkable
Family history: Unremarkable
Allergies: None
Review of system: No fever, no cough, no chest pain, has diarrhea sometimes, no dyspepsia, no stool with blood, and has upper abdominal pain.

Physical exam

General Appearance: Looks good
BP: 100/60
Pulse: 80
Resp.: 20
Temp. : 36.5

Hair, eyes, ears, nose, and throat: Okay.
Neck: No goiter and no lymph node.
Lungs: Clear both sides.
Heart: Regular rhythm, no murmur
Abdomen: Soft, flat, not tender, and positive bowel sound.
Limbs: No stiffness and no joint pain.

Assessment: Dyspepsia, Parasitis?

Recommend: Should we cover her here with some medications like Famotidine, 40 mg once daily for one month, plus Albendazole 100mg twice daily for three days? Please give me any other ideas.

From: "Kelleher, Kathleen M. - Telemedicine" <KKELLEHER@PARTNERS.ORG>
To: "'davidrobertson1@yahoo.com'" <davidrobertson1@yahoo.com>,
"'dmr@media.mit.edu'" <dmr@media.mit.edu>
Subject: FW: patient #5, CHHOURN EART, Cambodia Telemedicine, 24 October 2
002
Date: Thu, 24 Oct 2002 16:02:13 -0400

> -----Original Message-----

> From: Fairchild, David Grandison,M.D.

> Sent: Thursday, October 24, 2002 4:01 PM

> To: Kelleher, Kathleen M. - Telemedicine

> Subject: RE: patient #5, CHHOURN EART, Cambodia Telemedicine, 24 October

> 2002

>

> My response:

>

> If the patient has not had any weight loss, I agree with plan to treat with

> Famotidine, 40 mg once daily for one month, plus Albendazole 100mg twice daily

> for three days.

> However, if the patient has had weight loss over the past 6 months of more

> than 5 Kg, then I recommend an upper gastrointestinal endoscopy or

> radiographic study.

>

> David Fairchild, MD

>

From: "Graham Gumley" <ggumley@bigpond.com.kh>

To: "'David Robertson'" <davidrobertson1@yahoo.com>

Cc: "'Gary Jacques'" <gjacques@bigpond.com.kh>

Subject: RE: patient #5, CHHOURN EART, Cambodia Telemedicine, 24 October 2002

Date: Fri, 25 Oct 2002 11:23:36 +0700

Importance: Normal

SHCH Reply:

Agree with this plan.

Graham Gumley

Date: Thu, 24 Oct 2002 02:54:33 -0700 (PDT)
From: David Robertson <davidrobertson1@yahoo.com>
Subject: patient #6, CHAN KEN, Cambodia Telemedicine, 24 October 2002
To: JKVEDAR@PARTNERS.ORG, KKELLEHER@PARTNERS.ORG,
"Gere, Katherine F." <KGERE@PARTNERS.ORG>, ggumley@bigpond.com.kh
Cc: dmr@media.mit.edu, "Kedar, Iris,M.D." <IKEDAR@PARTNERS.ORG>,
Jennifer Hines <sihosp@bigpond.com.kh>, aafc@forum.org.kh,
Bernie Krisher <bernie@media.mit.edu>, telemedicine_cambodia@yahoo.com

Telemedicine Clinic in Robib, Cambodia - 24 October 2002

Patient #6: CHAN KEN, male, 17 years old, student

Chief complaint: Swollen and painful on both scrotums, and fever for the last two days.

History of present illness: Two days ago he developed a fever, swelling, and pain on both scrotums, pain increasing during high fever and walking. Sometimes he has the chills. After getting these symptoms he came to see us immediately.

Current medicine: Paracetemol, two grams per day for two days.

Past medical history: Last year he got malaria but was treated well with modern medicine.

Social history: Unremarkable

Family history: Unremarkable

Allergies: None

Review of system: Has fever, no cough, no chest pain, no abdominal pain, no stool with blood, and no dyspepsia.

Physical exam

General Appearance: Looks mildly sick.
BP: 90/40
Pulse: 120
Resp.: 24
Temp. : 38.7

Hair, eyes, ears, nose, and throat: Okay.
Neck: Has no mass and no lymph node.
Lungs: Clear both sides.
Heart: Regular rhythm, no murmur
Abdomen: Soft, flat, not tender, and positive bowel sound.
Limbs: Okay
Genital: Both scrotums swollen, painful, hot to touch, and red.

Assessment: Orchitis? Rule out malaria (tested negative at local clinic two days ago.)

Recommend: Should we cover him with Cloxxicillin 500 mg four times daily for ten days? And Paracetemol 500 mg four times daily for five days. Please give me any other ideas.

From: "Kelleher, Kathleen M. - Telemedicine" <KKELLEHER@PARTNERS.ORG>
To: "'davidrobertson1@yahoo.com'" <davidrobertson1@yahoo.com>,
"'dmr@media.mit.edu'" <dmr@media.mit.edu>
Subject: FW: patient #6, CHAN KEN, Cambodia Telemedicine, 24 October 2002
Date: Thu, 24 Oct 2002 15:59:00 -0400

> -----Original Message-----

> From: Kim, Samuel H.,M.D.

> Sent: Thursday, October 24, 2002 3:55 PM

> To: Kelleher, Kathleen M. - Telemedicine

> Subject: RE: patient #6, CHAN KEN, Cambodia Telemedicine, 24 October

> 2002

>

> He needs an ultrasound of his scrotum looking for epididymo-orchitis or

> testicular torsion. Also, besides Malaria, other parasitic diseases such

> as Schistosomiasis should be ruled out.He should be covered with broad

> spectrum antibiotics. So he should be seen at a hospital.

>

> Dr. Sam Kim

From: "Graham Gumley" <ggumley@bigpond.com.kh>

To: "'David Robertson'" <davidrobertson1@yahoo.com>

Cc: "'Gary Jacques'" <gjacques@bigpond.com.kh>

Subject: RE: patient #6, CHAN KEN, Cambodia Telemedicine, 24 October 2002

Date: Fri, 25 Oct 2002 11:25:13 +0700

Importance: Normal

SHCH Reply:

This patient will need hospital admission for IV antibiotics and observation.

Graham Gumley

Date: Thu, 24 Oct 2002 03:09:34 -0700 (PDT)
From: David Robertson <davidrobertson1@yahoo.com>
Subject: patient #7, PEN VANNA, Cambodia Telemedicine, 24 October 2002
To: JKVEDAR@PARTNERS.ORG, KKELLEHER@PARTNERS.ORG,
"Gere, Katherine F." <KGERE@PARTNERS.ORG>, ggumley@bigpond.com.kh
Cc: dmr@media.mit.edu, "Kedar, Iris,M.D." <IKEDAR@PARTNERS.ORG>,
Jennifer Hines <sihosp@bigpond.com.kh>, aafc@forum.org.kh,
Bernie Krisher <bernie@media.mit.edu>, telemedicine_cambodia@yahoo.com

Telemedicine Clinic in Robib, Cambodia - 24 October 2002

Patient #7: PEN VANNA, female, 37 years old

Follow up patient from September 2002

Please see last month's data that follows in another message.

History of present illness: We sent this patient to Kampong Thom Hospital last month. We think she has mild hypertension and DMII, and possibly ischaemic heart disease? We sent the Boston and SHCH opinions to Kampong Thom Hospital with the patient last month. The doctors in Kampong Thom say she has no signs of our diagnosis and sent her back to the village. Now the patient is back to see us again.

Physical exam

BP: 160/100
Pulse: 80
Resp.: 20
Temp. : 36.5
Blood sugar: 255mg/dl

Assessment: We still think she has mild hypertension, DMII, and IHD?

Recommend: Please give me any other ideas for this patient.

Date: Thu, 24 Oct 2002 03:17:06 -0700 (PDT)
From: David Robertson <davidrobertson1@yahoo.com>
Subject: September 2002 data on PEN VANNA, Cambodia Telemedicine, 24 October 2002
To: JKVEDAR@PARTNERS.ORG, KKELLEHER@PARTNERS.ORG,
"Gere, Katherine F." <KGERE@PARTNERS.ORG>, ggumley@bigpond.com.kh
Cc: dmr@media.mit.edu, "Kedar, Iris,M.D." <IKEDAR@PARTNERS.ORG>,
Jennifer Hines <sihosp@bigpond.com.kh>, aafc@forum.org.kh,
Bernie Krisher <bernie@media.mit.edu>, telemedicine_cambodia@yahoo.com

Date: Mon, 23 Sep 2002 21:13:54 -0700 (PDT)
From: David Robertson <davidrobertson1@yahoo.com>
Subject: Cambodia Telemedicine, 24 Sept. 2002, Patient # 2, PEN VANNA, female, 37 years old
To: JKVEDAR@PARTNERS.ORG, KKELLEHER@PARTNERS.ORG,
"Gere, Katherine F." <KGERE@PARTNERS.ORG>, ggumley@bigpond.com.kh,
gjacques@ucd.net, jacques@bigpond.com.kh
Cc: "Kedar, Iris,M.D." <IKEDAR@PARTNERS.ORG>,
Jennifer Hines <sihosp@bigpond.com.kh>, aafc@forum.org.kh,
Bernie Krisher <bernie@media.mit.edu>, dmr@media.mit.edu,
telemedicine_cambodia@yahoo.com

Please reply to dmr@media.mit.edu

Telemedicine Clinic in Robib, Cambodia - 24 September 2002

Patient #2: PEN VANNA, female, 37 years old, teacher

Chief complaint: She has limb numbness, frequency of urination, and sometimes chest tightness radiating to upper back, on and off for six months.

History of present illness: For six months patient has had chest tightness and frequency of urination, chest pain like burning, sometimes get worse during nighttime, better after a massage on chest. Pain radiates to upper back, lasting 20 minutes per occurrence, and it happens once per day. She gets these symptoms accompanied by headache, dizziness, blurred vision, and limb numbness and sweating.

Current medicine: Paracetemol, 1 gram per day, for one month.

Past medical history: In 1995, she had Typhoid Fever.

Social history: Unremarkable

Family history: Unremarkable

Allergies: Solucamp, in 1993.

Review of system: Has chest tightness, has dizziness, has headache, no diarrhea, has upper abdominal pain, no fever, no stool with blood, no dyspnea, and no cough.

Physical exam

General Appearance: Looks well.
BP: Left = 160/100, Right = 180/120
Pulse: 80
Resp.: 20
Temp. : 36.5

Hair, eyes, ears, nose, and throat: Okay.
Lungs: Clear both sides.
Heart: Regular rhythm, no murmur
Abdomen: Soft, flat, not tender, positive bowel sound, and no mass.
Limbs: Not swollen, not stiff, mild numbness on the soles.
Blood Sugar: 185mg/dl
Urinalysis: Glucose +3, Urobilinogen +2.

Assessment: Mild Hypertension, DM Type II, Ischaemic heart disease?

Recommend: Can we try medication that we have in the village like:

- **Propranolol, 20mg daily, for one month**
- **Diamecrone, 40mg daily, for one month**
- **Paracetemol, 500mg, four times per day, for one month**

Or should we send her to Kampong Thom Hospital to evaluate her and do some blood work like lyte, create, Bun, CBC, and Chest x-ray and EKG?

From: "Gary Jacques" <gjacques@ucd.net>
To: "David Robinson" <dmr@media.mit.edu>
Subject: Patient pen vanna
Date: Tue, 24 Sep 2002 14:15:04 +0700
Importance: Normal

This patient should be sent to a medicine clinic for diagnostic evaluation. She has possible symptoms of diabetes or cystitis. she has elevated blood pressure on one exam but needs repeat to confirm. Unclear cause of chest tightness. Needs MD to evaluate.

Thanks --Gary

From: "Kedar, Iris,M.D." <IKEDAR@PARTNERS.ORG>

To: 'David Robertson' <davidrobertson1@yahoo.com>

Cc: "Kelleher, Kathleen M. - Telemedicine" <KKELLEHER@PARTNERS.ORG>

Subject: RE: Cambodia Telemedicine, 24 Sept. 2002, Patient # 2, PEN VANNA,

female, 37 years old

Date: Tue, 24 Sep 2002 12:37:34 -0400

Hi,

This patient has several problems and should be transported to Kampong Thom Hospital. My recommendations follow:

1. Diabetes with associated peripheral neuropathy.

- I am not familiar with diamecrone, but if this is a diabetes agent that is fine, she needs some medication to control her blood sugar

- Chem7 to check blood glucose and evaluate renal function

- other basic diabetes care includes eye exam and foot exam

2. Hypertension. Her diastolic blood pressure is quite high. I would not treat her with a beta-blocker as this can mask symptoms of hypoglycemia. A better choice is a an ACE inhibitor, which can slow the progression of renal disease in a diabetic.

3. Chest pain. The ddx include musculoskeletal, supported by the improvement with massage; hearburn, supported by the burning nature and the fact that it is worse at night. The radiation to the back brings up an aortic dissection, but this is less likely given the pain is not acute onset or sharp, and she does not have >30mm Hg differential in blood pressure in opposite arms. Ischemic chest pain is possible.

- EKG

- CXR

- Ibuprofen 600mg TID with food for possible musculoskeletal component of pain

I hope this helps. Thanks.

Sincerely,

Iris Kedar, M.D.

-----Original Message-----
From: Kelleher, Kathleen M. - Telemedicine
Sent: Thursday, October 24, 2002 2:04 PM
To: Kedar, Iris,M.D.
Subject: FW: patient #7, PEN VANNA, Cambodia Telemedicine, 24 October 2002

Hello Dr. Kedar:

Here is a follow up case for a patient whose case you reviewed in September. Please call with any questions or comments.

Kathy

From: "Kelleher, Kathleen M. - Telemedicine" <KKELLEHER@PARTNERS.ORG>
To: "'davidrobertson1@yahoo.com'" <davidrobertson1@yahoo.com>,
"'dmr@media.mit.edu'" <dmr@media.mit.edu>
Subject: FW: patient #7, PEN VANNA, Cambodia Telemedicine, 24 October 2002
Date: Thu, 24 Oct 2002 15:59:29 -0400

-----Original Message-----
From: Kedar, Iris,M.D.
Sent: Thursday, October 24, 2002 3:44 PM
To: Kelleher, Kathleen M. - Telemedicine
Subject: RE: patient #7, PEN VANNA, Cambodia Telemedicine, 24 October 2002

Hello,

It is not clear what the opinion was of the doctors at Kampong Thom Hospital. I am also not clear on what the patient's current symptoms are, and whether she has been treated for anything. Given the objective findings, she very likely has diabetes and hypertension. A random blood sugar of >200 mg/dl, repeated of another occasion, confirms diabetes. High blood pressure must be confirmed on 3 occasions, and today she has her second elevated reading.

- Diamecrone is fine for diabetes if that is what you have

- Again, I would suggest an ACE inhibitor or diuretic in a hypertensive patient who likely has diabetes; if there is no other alternative a beta-blocker such as propranolol is fine.

I hope this helps.

Sincerely,

Iris Kedar, M.D.

From: "Gary Jacques" <gjacques@bigpond.com.kh>
To: "Telemedicine Project" <davidrobertson1@yahoo.com>
Cc: "David Robinson" <dmr@media.mit.edu>
Subject: pt7:Pen Vanna
Date: Fri, 25 Oct 2002 13:01:40 +0700
Importance: Normal

Agree with your diagnosis. You can instruct patient on a low salt, diabetic diet in the meantime. Send your documentation with the patient (your blood pressure reading on several occasions, her random blood sugar levels). If still no response at local hospital, try the next available one.

--Gary

Date: Thu, 24 Oct 2002 03:39:50 -0700 (PDT)
From: David Robertson <davidrobertson1@yahoo.com>
Subject: patient #8, SOR SOPHY, Cambodia Telemedicine, 24 October 2002
To: JKVEDAR@PARTNERS.ORG, KKELLEHER@PARTNERS.ORG,
"Gere, Katherine F." <KGERE@PARTNERS.ORG>, ggumley@bigpond.com.kh
Cc: dmr@media.mit.edu, "Kedar, Iris,M.D." <IKEDAR@PARTNERS.ORG>,
Jennifer Hines <sihosp@bigpond.com.kh>, aafc@forum.org.kh,
Bernie Krisher <bernie@media.mit.edu>, telemedicine_cambodia@yahoo.com

Telemedicine Clinic in Robib, Cambodia - 24 October 2002

Patient #8: SOR SOPHY, female, 30 years old, farmer

Chief complaint: Epigastric pain for the last three months.

History of present illness: Three months ago she developed epigastric pain on and off accompanied by nausea in the morning and excessive saliva, pain like cramping, increased pain when not eating, decreased pain after a meal, so she came to see us.

Current medicine: None.

Past medical history: None.

Social history: Unremarkable

Family history: Unremarkable

Allergies: None

Review of system: Has headache, has nausea, and has abdominal pain at epigastric area, no cough, no dyspnea, and no stool with blood.

Physical exam

General Appearance: Looks good
BP: 90/50
Pulse: 80
Resp.: 20
Temp. : 36.5

Hair, eyes, ears, nose, and throat: Okay.
Neck: No goiter and no lymph node.
Lungs: Clear both sides.
Heart: Regular rhythm, no murmur
Limbs: No stiffness and no joint pain.

Assessment: Dyspepsia.

Recommend: Should we cover her with an antacid like Tums, 500 mg three times daily for two month. Please give me any other ideas.

From: Kedar, Iris,M.D.
Sent: Thursday, October 24, 2002 4:29 PM
To: 'David Robertson'
Cc: Kelleher, Kathleen M. - Telemedicine
Subject: RE: patient #8, SOR SOPHY, Cambodia Telemedicine, 24 October 2002

Hello,

I agree that this woman has some sort of dyspepsia. The epigastric pain is concerning for an ulcer, it is reassuring that she has no blood in her stool. Does she have abdominal pain upon palpation? Are there any masses? Assuming no masses, I would recommend famotidine for one month and ask her to follow-up to see if she is feeling better. If they do h. pylori blood testing this would also be useful, and if positive would involve several medications for treatment.

I hope this helps.

Sincerely,

Iris Kedar, M.D.

From: "Graham Gumley" <ggumley@bigpond.com.kh>

To: "'David Robertson'" <davidrobertson1@yahoo.com>

Cc: "'Gary Jacques'" <gjacques@bigpond.com.kh>

Subject: RE: patient #8, SOR SOPHY, Cambodia Telemedicine, 24 October 2002

Date: Fri, 25 Oct 2002 15:05:47 +0700

Importance: Normal

SHCH Reply:

Agree with this plan.

Graham Gumley

Follow up Report, Friday, October 25, 2002

Per e-mail advice of the physicians in Boston and Phnom Penh, the following patients were given medication found in the village or donated by Sihanouk Hospital Center of Hope:

May 2001 Patient: SOM THOL, male, 48 years old

September 2001 Patient: CHOURB CHORK, male, 28 years old

January 2002 Patient: SAO PHAL, female, 55 years old

September 2002 Patient: PEN SAMADY, male, 36 years old

Patient #4: SOURN VOEUN, female, 52 years old

Patient #5: CHHOURN EART, female, 26 years old, farmer

Patient #7: PEN VANNA, female, 37 years old

Patient #8: SOR SOPHY, female, 30 years old, farmer

Blood was taken from the following patients in the village for testing at Sihanouk Hospital Center of Hope in Phnom Penh:

- **July 2002 Patient #7: CHHIM KENG**, female, 45 years old
- **Patient #3: SOM MAN**, female, 51 years old, farmer

Because of the long travel time and limited medical facilities outside of Phnom Penh, the blood is collected in the village, stored in an ice cooler, then driven to Kampong Thom Provincial Hospital where it is "spun" and returned to the ice cooler for the rest of the journey to Sihanouk Hospital in Phnom Penh. This month the drive was a little more than seven hours not including Hospital and lunch stops. We were able to save the two patients a very long bumpy ride from the village to the city.

Per e-mail advice of the physicians in Boston and Phnom Penh, the following patients were

given transport or assistance in getting to the hospital:

Transported on 25 October and admitted to Kampong Thom Provincial Hospital:

- **September 2002 Patient #1: NGET SOEUN**, male, 59 years old, farmer
- **Patient #2: MUY VUN**, male, 36 years old, teacher
- **Patient #6: CHAN KEN**, male, 17 years old, student

Transport arranged on 27 October to Sihanouk Hospital Center of Hope in Phnom Penh:

- **Patient PHIM SICCHIN,** female, 35 years old, previous Telemedicine patient for medical check-up and refill of medication at SHCH
- **Patient PROM CHHIM,** male, 63 years old, previous Telemedicine patient for medical check-up and refill of medication at SHCH
- **Patient YIN HUN,** female, 66 years old, previous Telemedicine patient for medical check-up and refill of medication at SHCH

Transport arranged for 27 October to Calmette Hospital Cardiology Center in Phnom Penh:

- **Patient PHIM SOPHAN**, male, 14 year old child, previous Telemedicine patient (February 2001) for medical check-up and refill of heart medication

Transport arranged for 7 November to Calmette Hospital Cardiology Center in Phnom Penh:

- **Patient PHIM SOPHAN**, male, 14 year old child, previous Telemedicine patient (February 2001) for echocardiogram, other tests and evaluation for his heart condition

Transport was arranged for 29 October and the patient admitted to Kampong Thom Provincial Hospital:

- **Patient #1: LENG HAK**, male, 67 years old, farmer

Transport arranged for 21 November to Sihanouk Hospital Center of Hope in Phnom Penh:

- **Patient CHAY CHANTHY,** female, 38 years old, previous Telemedicine patient, for medical testing and refill of medication at SHCH

Transport arranged for 13 November to Kantha Bhopa Children's Hospital in Phnom Penh:

- **Patient SENG SAN**, female, 13 year old child, Telemedicine patient (June 2001,) for medication and chronic care for polyarthritis.

Transport arranged for 24 November to Calmette Hospital Cardiology Center in Phnom Penh:

- **Patient CHHEM LYNA**, female, 2 year old child, previous Telemedicine patient (February 2001) for medical check-up and refill of heart medication

The following photo is of a mother and her sick baby who traveled some distance from outside Robib Village to the medical clinic in Rovieng. The clinic staff and a visiting Cambodian doctor who was at the clinic in her capacity as a health official from Preah Vihear province examined the child. The doctor thought that the child had been sick for a while and needed oxygen quickly. She urged the mother to travel as soon as possible to the closest source of oxygen which was Kampong Thom Provincial Hospital, about three hours south of the village by car. It was midday and the daily pickup truck taxi had already departed the village early that morning. I gave the mother five dollars and the clinic staff

helped her to hire a motorcycle taxi and the mother and child were quickly on their way.

Nurse Montha suggested to the doctor/official that this case demonstrated that the village clinic needed oxygen provided. Nurse Montha further suggested that two size tanks be provided – a large tank for the clinic, and a smaller portable oxygen tank that could travel with a patient during a future emergency trip to the hospital. The provincial health official agreed to provide the oxygen to the clinic "as soon as possible."

About 90 minutes later, unfortunately the child stopped breathing and died enroute, halfway between the village and the hospital.

The next Telemedicine Clinic is scheduled for November 26, 2002.

[English Version][Khmer Version]