

Children`s Medical Report

Rolpa



**Introduction**

From April 14 to April 22, 2015, a team of the International Nepal Fellowship (INF) and associated international medical staff visited the district hospital of Liwang, capital city of the Rolpa District, Western Nepal. Originally planned as a single Ear Camp with four ENT specialists from the U.K. and Canada, INF decided to run a small paediatric clinic along with the Camp. Thirty eight children between 0 and 10 years of age where treated free of charge by a paediatrician, and hundreds more at the Ear Camp.

Rolpa is a hill district some 280 km west of [Kathmandu](https://en.wikipedia.org/wiki/Kathmandu) in the [Rapti](https://en.wikipedia.org/wiki/Rapti_Zone) [Zone](https://en.wikipedia.org/wiki/Zones_of_Nepal) of [Nepal](https://en.wikipedia.org/wiki/Nepal)'s [Mid-Western](https://en.wikipedia.org/wiki/Mid-Western_Region%2C_Nepal) [Region](https://en.wikipedia.org/wiki/Regions_of_Nepal). Rolpa covers an area of 1,879 km² with a population of 221,177 (2011). [Liwang](https://en.wikipedia.org/wiki/Liwang%2C_Rolpa) is the district's administrative center.



Districts of the Rapti Zone; Rolpa in the center (orange colored)

By Nepalese standards, Rolpa is an underdeveloped area plagued by low life expectancy (52 years) and poverty (averaging about US$ 100 per capita per year). It was a major flashpoint in the 1996-2006 [civil war](https://en.wikipedia.org/wiki/Nepal_Civil_War). Most of Rolpa is rugged highlands populated by the indigenous [*Kham Magar*](https://en.wikipedia.org/wiki/Kham_Magar) ethnicity. Irrigated [rice fields](https://en.wikipedia.org/wiki/Paddy_field) along the Madi Khola are of limited extent because the river follows a narrow gorge. In any case, the Kham Magar live about a thousand meters upslope where little rice can be grown. Upland harvests of [maize](https://en.wikipedia.org/wiki/Maize), [millet](https://en.wikipedia.org/wiki/Millet) and [barley](https://en.wikipedia.org/wiki/Barley) are invariably insufficient and so Rolpa suffers chronic food deficits. As long as [marijuana](https://en.wikipedia.org/wiki/Cannabis_%28drug%29) and [*charas*](https://en.wikipedia.org/wiki/Charas) ([hashish](https://en.wikipedia.org/wiki/Hashish)) were legal in Nepal they were grown and processed in Rolpa and sent to [Kathmandu](https://en.wikipedia.org/wiki/Kathmandu) to be sold in government monopoly stores. In 1976 the government gave in to international pressure and stopped buying these products, causing the district to lose an important source of cash income. Kham also make ends meet by selling their labour. They work as agricultural labourers in other districts, as porters, [soldiers](https://en.wikipedia.org/wiki/Gurkha) and general labourers, but their input is devalued by Rolpa's underdeveloped education infrastructure. There is no post-secondary education in the district, and students who speak more [*Magar bhasha*](https://en.wikipedia.org/wiki/Kham_language) than [Nepali](https://en.wikipedia.org/wiki/Nepali_language) are disadvantaged in primary and secondary education because Nepali is the medium of instruction and the national examination system selects against students who are not proficient in it. Without educational credentials Kham lack access to the more desirable jobs.

The various grievances of Rolpa's population made the district ripe for revolt. It became a "Maoist Stronghold" of the [Communist Party of Nepal](https://en.wikipedia.org/wiki/Communist_Party_of_Nepal).[2] In May 2002 a major battle between Maoist guerillas and the army was fought at Lisne Lekh near the Rolpa-Pyuthan border.

Unfortunately, many men from this area travel to India, Malaysia or the Middle East to work if they are able – with families often separated for many years. The wives sometimes do not hear anything from their husbands for months or even years. Some do not even receive any money from them and work very hard to raise their children and support their poor families. Many husbands die unknown abroad.

The international team of physicians consisted of Mike Smith (ENT Consultant and head of the ENT team), John Rutka (ENT Professor), Tom Martin (ENT Consultant), Serge Pal (Senior ENT Trainee), Claire Ferrer (general practitioner), Mercedes Ogal (paediatrician), Alan Bennett (Consultant Anesthetist), Neil Fergusson (Consultant Anesthetist) and Hans Ogal (Consultant Anaesthetist and pain management specialist). This team was augmented by three audiologists, three scrub nurses and a Nepalese team from INF with volunteers / translators and two drivers. Eka Dev Devkota was the leading Camp Coordinator and organizer from INF.

In total, this multidisciplinary group consisted of 28 team members primarily performing at the Ear Camp.

From April 14 until April 21, 1108 patients were seen in the Outpatient Department (OPD). Up to April 21, 639 audiometries were carried out and 317 hearing aids fitted. A total of 111 operations were performed. It was a busy camp.

Technical equipment, toothbrushes and some of the supplies for the Children`s Camp were brought from Switzerland and England. The medication was ordered by Eka Dev Devkota in Nepal.

Support from the organizing committee included the following (amongst other things):

* Selection of patients and care givers
* Facilitating board and lodging for all INF team members
* Transportation of the INF team to the camp location
* Prior announcement of the Ear Camp in the location
* Providing copies of all necessary papers
* Giving support in ordering and delivering the medication
* Giving support to the team during the medical camp

On the first day, the team arrived after lunch and started the OPD immediately. Everything had been set up very efficiently by the Nepalese team which had arrived earlier for the Surgical Camp, which was running from March 31 to April 15, 2015.

The international team was very happy with the cooperation from the organizers and the active, direct support and enthusiasm of the local volunteers.

Last but not least, we would like to thank the patients and especially the children and their caregivers who came to the camp for their friendly, warm presence.

**Children treated aside from the Ear Camp**

The major priority of the Camp was the treatment of ear diseases in children and adults. Every day over 200 patients arrived at the Outpatient Department (OPD). On April 20 we had to stop registering new patients because no more operations, audio or fitting of hearing aids could be offered.

The Children`s Camp was not announced prior to the Camp. So at the beginning of the Camp the paediatrician worked in the OPD, seeing hundreds of outpatients as well as syringing ears. This help was needed and it was hardly possible to see children in between. On April 19 the patients seemed to realize that a paediatrician was around and patients arrived with various diseases. After closing the Ear OPD on April 20, there was more time to see paediatric patients in the afternoon. On April 20, it was planned to make reports and compile statistics while operations, as well as fitting of hearing aids, were going on. The rooms of the OPD were prepared for the post-OP day (April 22). In the morning, suddenly quite a lot of paediatric patients arrived (around 15-20). After 5 patients, the organizer had to send them away because otherwise all the other work could not have been accomplished.

A detailed report of each little patient is in the supplement at the end of the report.

Table 1: Number of checked children by date.

|  |  |
| --- | --- |
| Date  | Number of children  |
| 14/4  |  2 |
| 15/4  |  2 |
| 16/4  |  3 |
| 17/4  |  1 |
| 18/4  |  4 |
| 19/4  |  6 |
| 20/4  |  13 |
| 21/4 |  5 |
| 22/4 |  1 |
|  |  2 from hospital |
| Total |  38 children |

**Interpretation:**

Treating children along with an ENT Camp for the first time was a special experience. The main concerns of the parents were illnesses like vomiting and coughing and it was impressive how much they wanted to have medication. Quite a lot of them went to the hospital a day or more earlier and came with multiple antibiotic treatments of illnesses which seemed to be viral. I was told that “you are only a good doctor if you give medications, if possible by injection“. The people are used to this. We tried to give as much health care information as possible. It was surprising how many families and children are on a vegetarian diet. One evening on the way back to the hotel one mother asked us on the road: „is it important to give children meat to eat?” The village was talking about the information we provided.

One of the most difficult challenges we faced was the language. Not always was there an experienced Nepalese speaking translator available. Rolpa has a special dialect, which is difficult to understand. And especially in the care of children it is very important to get good information and to „feel“ the parents in their needs.

We were only able to see a small number of children. The Ear Camp was very busy and took up most of the worktime. However, it was good to „get a peep“ at the needs of the children and their parents for planning further Camps.

**1: Growth abnormality and malnutrition:**

Malnutrition has been related to poor cognitive and school performance. There is strong evidence to suggest that malnutrition places children under the age of 5 at increased risk of death. Literature from the Philippines shows that 4 million children there are chronically malnourished. The main factors contributing to malnutrition in Manila are urban slum poverty, lack of sanitation, poor living conditions (overcrowding), child labour and child abuse, lack of protein intake, iron and multivitamins .
The prevalence of stunting, wasting and underweight in Rolpa could only be estimated as being quite high, because the number of treated children was too small. Malnutrition is thought to account for one third of all deaths of children under five (UN Millennium Developmental Goals).

We treated all children with growth/nutrition abnormalities with multivitamins, and spread the knowledge to the care takers about the necessity of fruit and green vegetables in their children’s diets. Advice was customized to the availability and cost of local fruits, highlighting bananas, apples, papayas and mangos rich in vitamins A and C.

**2: Anaemia:**

Anaemia is the most prevalent micronutrient disorder. To date, no research data exist on the number of children in Nepal with anaemia as a result of poor health and malnutrition as well as poor environments. 95% of the anemia is due to iron deficiency.

In Nepal, there is no national policy to provide iron supplements to pregnant women and young children up to 5 years of age. While iron deficiency is frequently the primary factor contributing to anaemia, it is important to recognize that the control of anaemia requires a multi-faceted approach which, through integral interventions, addresses the various factors that play a significant role in producing anaemia in a given community. In addition to iron deficiency, other nutritional deficiencies, infectious diseases, such as worm infections, and other chronic infections, particularly tuberculosis, play a significant role.

We treated the children with anaemia with iron supplements for three months. To combat anaemia, vitamin C intake is important because vitamin C facilitates the uptake of iron in the gut (just as milk and tea counteract it).

**3: Worm treatment:**

Pinworm infections and other helminths are widespread in Nepal and most common amongst children, especially those who play in soil containing mature eggs and who do not have good hygiene habits. Severe infections in young children can result in trichiuris dysentery syndrome: bloody mucoid diarrhoea, anaemia and retarded growth.
If whipworm infection is serious, this causes intestinal lower or epigastric pain, lack of concentration and fatigue. In severe and prolonged infections impaired physical or mental development in children results, most likely to be multifactorial, incorporating vitamin deficiencies and malnutrition caused by the abnormal functioning of the intestine.

On some occasions, a whipworm may be noticed when it crawls up into the throat and exits through the nose or mouth. A strong relationship exists between Ascaris Lumbricoides, or T. Trichiura infection and anemia.

We treated children prophylactically on the spot with one tablet of Mebendazol 100 mg. Some children were already enrolled in a local anti-worm campaign.

**4: Respiratory problems:**
Some of the children were seen with an acute respiratory infection (ARI) and treated with antimicrobials and home treatment advice. One child needed acute hospitalization with oxygen supplementation and frequent nebulizing. There was no possibility of treating children with salbutamol nebulizing at home. Even the hospital only had one nebulizer. So the only possibility was salbutamol suspension.

**6: Skin diseases:**

We saw only a few children with skin diseases such as fungal dermatitis and Impetigo Contagiosa.

**7: Dental:**

In general, high caries prevalence was found. We are unsure whether fluor is added to the drinking water in Nepal. A high correlation was found between deplorable dental care and the intake of sweets and sugary beverages.
This INF Camp did not include dentists. Clinically we diagnosed a lot of caries profunda. We stressed the importance of proper dental hygiene and the banning of sugary products, beverages and fast food to the children, their caregivers and their teachers.

**Summary:**

The key to the people is the language. This is a problem in a rural district like Rolpa with its own dialect. Even our translators often struggled to understand the patients, parents and children.

For a further Children`s Camp a local translator with medical experience is absolutely mandatory. Otherwise it will be difficult to get good feedback and to hear and „feel“ the needs of the families.

The second important key is the education of health workers, caregivers and other local helpers. Based on WHO estimates, 25 % of the global burden of disease is due to preventable environmental exposures with the greatest burden on children in low-income and developing countries. Training and especially expertise in environmental health is very desirable. Nutritious food, deworming, iron and vitamin supplements, as well as hygiene should be key components of local health promotion.

During this camp there was a lack of time to do separate education courses for groups of caregivers. So we talked to each parent and we recognized that they spread the information and discussed our suggestions. We paid special attention to issues of hygiene and nutritional advice. We emphasized hand-washing, vitamin C, fruit and dark green vegetable intake. We noticed that many mothers fed their babies up to the age of one year or more exclusively with breast milk. For babies, we advised exclusive breastfeeding up to six months only and then to start with the introduction of additional food.

Besides the nutrition factor there is the need of further health education, aimed at increasing awareness of worm transmission, the different problems caused by intestinal helminth and the importance of de-worming every six months. Ways of improving personal hygiene and sanitation through hand washing, nail trimming, wearing of shoes/boots and use of a latrine and clean water supplies should be encouraged, noting the deplorable housing conditions of many families. Although all members of a population can be infected by intestinal parasites, those who are most at risk and would benefit most from preventive intervention, such as deworming campaigns, are the pre-school and school children.

Preventing oral/dental disease in the general population is important, especially with the increase of junk-food. A diet high in carbohydrates and sugar results in profound caries. Therefore, many changes need to be made, starting with health promotion activities. We tried to teach proper hygiene and handed out toothbrushes and toothpaste to the children.

**Future medical needs and conclusions:**

The small number of children seen during this Ear Camp already showed the strong need for preventive medical help for the children in Rolpa. Investing in capacity building and knowledge transfer about the circle of malnutrition, parasitosis and anaemia is essential.

In a future project/camp it is essential to obtain more knowledge about the local and government health programs and education of caregivers, if possible before planning and starting a camp. The important experience from other children’s organizations like MCC (Medical Checks for Children), which are already organizing camps for children in Nepal, should be integrated in a friendly and warm cooperation.

**General recommendations :**

* Preventing leading causes of disease: HELMITHS It is important to stress the importance of regular (6-monthly) de-worming of all children above 2 years up to fourteen years of age.
* Preventing leading causes of disease: UNHEALTHY NUTRITION Good eating habits, discouragement of fast food and sugary beverages with emphasis on nutritious food and fruits rich in iron and vitamins. Health promotion classes for mothers could be started, maybe extended by a health education program for pregnant mothers with special attention to breast feeding and good motherhood.
* Preventing leading causes of disease: CARIES Special emphasis needs to be put on health promotion family classes directed to personal hygiene in every-day life, the importance of hand washing with soap and dental care.
* Influencing health-related behaviour: knowledge, beliefs, skills, attitudes, values and support .

**Final remarks:**

My first trip to Rolpa was a rewarding experience. Cooperation and collaboration with the local organizations is exciting. The rural population taught us much about life, living in poor conditions yet welcoming us with warm smiles on their faces and being responsible, child-loving parents .

The whole team hopes to return to Rolpa, Nepal again in the coming years to work together with all the wonderful people who put their time and energy into creating a better world for all.

On behalf of the INF team Rolpa, Nepal 2015:

Mercedes Ogal, paediatric resident

**Supplement**

Patient 1:

A.G., 3 years old, female, from Liwang

*Weight:* 12kg (15th percentile – WHO Child Growth Standards)

*Height*: 89,5cm (3-15th percentile – WHO Child Growth Standards)

*Arm circumference:* 13,3cm

*Haemoglobin:* 8,0mmol/l

*Last Anti-Worm Tablet:* October 2014

*Last Immunization:* with 9month

History: Abdominal pain, fever and vomiting 2 weeks ago. He was given Cotrimoxazol for three days which didn`t work. Then he got Amoxizillin for 5 days and the fever disappeared. Also the Abdominal pain was getting better. Last night again fever. No vomiting or abdominal pain any more.

Examination: soft Abdomen, lungs, throat, ears, etc. fine.

Diagnosis: Viral infection

Treatment: wait and come again if fever does not go away after 5 days. If high fever: Paracetamol, Multivitamins

Patient 2:

N. O., 18 month old, male, from Liwang

*Weight:* 9kg (3th percentile – WHO Child Growth Standards)

*Height*: 77cm (3th percentile – WHO Child Growth Standards)

*Arm circumference:* 13cm

*Haemoglobin:* 5,4mmol/l

*Last Immunization:* 4 times since birth

History: Losing weight for three weeks, sometimes fever, sometimes vomiting. Eats mainly breast milk, little rice, bananas. No rhinitis, no coughing, normal stool. Mum told us he was 12kg at 9 months, now 9kg.

Examination: everything normal, wax in both ears

Diagnosis: most likely malnutrition and probably worm infection

Treatment: Multivitamins, Iron, Mebendazol

Patient 3:

D. K., 5 years old, male, from Liwang

*Weight:* 14kg (3th percentile – WHO Child Growth Standards)

*Height*: 101cm (3th percentile – WHO Child Growth Standards)

*Arm circumference:* 15cm

*Haemoglobin:* 7,1mmol/l

*Last Anti-Worm Tablet:* yesterday from hospital

*Last Immunization:* ?

History: Two episodes of discharge from the ears. Yesterday 10 times vomiting, today only 2 times. Mother worried because of vomiting.

Examination: looks tired. Temp. 37.6°C, abdomen soft, normal auscultation. Ear drums intact, secondary healed after perforation. Caries

Diagnosis: Gastroenteritis

Treatment: Careful diet. After vomiting stops start Multivitamins

Patient 4:

S. O., 2 month old, male, from Liwang

*Weight:* 5kg (15th percentile – WHO Child Growth Standards)

History: Little sleepy at the moment but otherwise healthy boy. No fever the mother told us. Drinking well. Went for blood check to hospital and had Lc 14`000 two days before at hospital. Yesterday Lc 13`000, 70% Neutrophiles. An injection with Gentamycin and Ampicillin was given.

Examination: healthy boy, good interaction, no fever

Diagnosis: Lc 14`000 and 13`000 is normal for 2month age.

Treatment: Nothing

Patient 5:

J., 8month old, male, from Liwang

*Weight:* 9kg (50-75th percentile – WHO Child Growth Standards)

*Height*: 65cm (<3th percentile – WHO Child Growth Standards)

*Arm circumference:* 15cm

*Haemoglobin:* 9.8mmol/l (yesterday in hospital – perhaps g/dl?)

*Last Immunization:* yesterday in hospital

History: Went to hospital yesterday because of fever and coughing which started the night before. Lc 7`500, Neutro 65%. Was given Ampicillin and Gentamycin Injection

Examination: good interaction, lung auscultation normal, no fever.

Diagnosis: viral upper airway infection

Treatment: Multivitamins

Patient 6:

K. C., 10 month old, female, from Babal 2

*Weight:* 6kg (<3th percentile – WHO Child Growth Standards)

*Height*: 57cm (<<3th percentile – WHO Child Growth Standards)

*Last Immunization:* ?

History: Fever coming and going for 4 days, today 96,6 F. Went to hospital three days ago and got Metronidazol and Amoxicillin & Calvulan Acid which mum mixed all together and gave it to her. Since visiting hospital and starting treatment diarrhoea started. Five times a day for three days, today only three times. Child vomits the medication. Mum worried. Until 4 months healthy, afterwards waking up several times at night, drinking well. Since ill drinks only milk and water. Good urine.

In hospital Lc 10`500, Neutro 85%

Examination: looks good, no sign of dehydration, Temp. 37,5°C, fungal dermatitis in right inguina. Abdomen soft, normal auscultation.

Diagnosis: Most likely viral infection. But was treated with antibiotics. Now antibiotic associated diarrhea and vomits the combination of the antibiotics. Fungal dermatitis right inguina

Treatment: Do not give both antibiotics at the same time. Make a gap of 2 hours in between. Come again if fever persists longer than 3 days. Multivitamins afterwards. Clotrimoxazol cream for fungal dermatitis.

Patient 7:

S. O., 4 years old, female, from Liwang

*Weight:* 15kg (15-50th percentile – WHO Child Growth Standards)

*Height*: 98cm (15th percentile – WHO Child Growth Standards)

*Arm circumference:* -

*Haemoglobin:* 7,6 mmol/l

*Last Anti-Worm Tablet:* 2-3 month ago

*Last Immunization:* last with 9month

History: Complains about sometimes redness at urethra/vagina – better with ointment

Examination: normal at the moment

Diagnosis: unspecific vulvo vaginitis

Treatment: Has had anti-worm treatment shorty before. Nutrition is good. Sitting bath every evening with black tea if red.

Patient 8:

M., 4years old, female, from Liwang

History: Mother is health care giver. Took 10-12 Capsules of Vitamin B-Complex five days ago. Overdose.

Examination: skin scaling forearms and calves

Diagnosis: overdose of Vitamin B-Complex

Treatment: No treatment, already five days ago, skin scaling stops already

Patient 9:

L. S., 3years old, male, from Liwang

History: „Pain“ in chest during running and coughing and parents concerned about a little bone exocytosis at the chest.

Examination: very healthy boy, good nutrition. Small cartilago exocytosis at the sternum left side

Diagnosis: small cartilago exocytosis chest

Treatment: Nothing to worry about

Patient 10:

B., 9years old, male, from Jankot

*Weight:* 20kg (<<3th percentile – WHO Child Growth Standards)

*Height*: 120cm (<3th percentile – WHO Child Growth Standards)

*Haemoglobin:* 7,2mmol/l

*Last Anti-Worm Tablet:* some weeks ago

*Last Immunization:* ?

History: referred from the ear OPD: stomach pain and diarrhoea – better after anti worm treatment. Now started again

Examination: abdomen soft, auscultation normal, looks good, thin mother

Diagnosis: Probably still worm infection

Treatment: Mebendazol treatment

Patient 11:

S., 5month old, male, from Liwang

*Weight:* 7kg (3th percentile – WHO Child Growth Standards)

History: Since 12am (2hours) mother thinks he could have fever. First day with warm and sunny weather

Examination: wrapped in thick clothes. Sweating. Temp. 38°C

Diagnosis: probably too much clothing during this warm and sunny midday

Treatment: reduce clothes. If fever is high then Paracetamol 150 mg max. every 6-8 hours. Re-visit if more than three days fever.

Patient 12:

K., 8month old, female

History: Had a little coughing, no vomiting. No fever. Got Amoxicilline from hospital. Now diarrhoea

Examination: Abdomen and lungs are fine, happy baby, getting her first tooth

Diagnosis: little viral upper airway infection during teething

Treatment: stop Amoxicilline

Patient 13:

A. B., 4 ½ years old, male, from Khot Gan

History: Urinates to right side, not straight (direction of urine). Mother concerned, because other people told her that he is infertile with this.

Examination: normal position of urethra, everything normal, perhaps small rotation

Diagnosis: normal

Treatment: carefully explained that he is fertile and everything is normal. No treatment.

Patient 14:

A., 28days old, female,

History: soft swelling of the scalp right occipital since birth

Examination: little fluctuating swelling of the right occipital scalp, big frontal and posterior fontanel.

Diagnosis: Haematoma of the scalp, right occipital from delivery

Treatment: Nothing. Vitamin D drops recommended but we do not have any in Camp

Patient 15:

T.B., 3years old, male, from Tobadur

History: First herniotomia left side at Kathamndu (age?). Re-herniotomia left side at Surgical Camp 4th of April (15days ago). It was a major re-herniation

Examination: two weeks after Re-herniotomia on the left side still big, hard swelling. Replacement not possible. Scar is well healed.

Ultrasound: organized haematoma

Diagnosis: quite big organized haematoma down to the scrotum

Treatment: wait 6 months. If any pain, swelling, redness: quick re-check

Patient 16:

D. N., 16 months old, male

*Weight:* 8,5kg (3th percentile – WHO Child Growth Standards)

History: Diarrhoea since 7 days, 4-5 times a day. No blood in stool. Tried electrolytes already.

Examination: abdomen soft, normal auscultation.

Diagnosis: Gastroenteritis for one week

Treatment: Metronidazol susp.

Patient 17:

K., 9 years old, male

*Weight:* 25kg (15-50th percentile – WHO Child Growth Standards)

*Height*: 123cm (3th percentile – WHO Child Growth Standards)

*Arm circumference:* -

*Haemoglobin:* 7,1mmol/l

*Last Anti-Worm Tablet:* with 4-5 years

*Last Immunization:* ?

History: Has had a pneumonia 6 months ago, afterwards good and healthy. Had cough for two days briefly. Now coughing after cold showers.

Examination: Lung auscultation is fine, mouth rhagades on both sides, caries

Diagnosis: DD mild upper airway infection/worm infection/iron deficiency

Treatment: Albendazol Tbl., HB Tin Caps.(Combination of Iron, Folic acid and Zinc)

Patient 18, 27, 31 and 36 (was seen four times):

R. S., 2 months old, male, from Liwang

*Weight:* 5kg (15th percentile – WHO Child Growth Standards)

History: Went to hospital yesterday because of coughing. Drinks well at breast. Started with Salbutamol susp. and Cefpodoxime sups. yesterday night. Concerned about breathing

Examination: No dehydration, last Paracetamol 6 hours ago, no fever (37,2°C), mild tachypnea (80`), tachycardia (150`) – from Salbutamol

Diagnosis: mild viral infection

Treatment: Stop Cefpodoxime and Salbutamol susp., re-check if getting worse.

Re-Visit one day later at 2pm:

Comes with X-ray of chest and abdomen (I don’t know why they did this): over-penetrated and not interpretable.

More coughing, feeding is getting difficult.

Examination: viral obstructive bronchitis both lungs. O2-saturation 95%, Hr 136`, Resp. 80`

Treatment: one dose Salbutamol sups. re-check after 2 hours

Re-Visit 2 hours later at 4pm:

Drinks better, O2-saturation 95%, Hr 167`

Treatment: Betamethasone 0,2mg/kg once, Salbutamol susp. Every 6 hours – re-check next morning

Re-Visit the next day at 10am:

A little better, drinks better. Last Salbutamol susp. 2 hours before. Night was good.

O2-saturation 91-92%, Hr 153, auscultation less obstructive but more mucous

Treatment: Betamethasone 0,2mk/kg second time, Salbutamol susp. every 6 hours – re-check next morning ) 22nd of April, last day of Camp

Re-Visit the following day at 10am:

Feeding was more difficult last night. O2-saturation 86%, Hr 157`, last Salbutamol 2 hours before. Mild Tachypnea, no fever, still obstructive bronchitis during auscultation.

Treatment: referred to the hospital, perhaps RSV bronchiolitis

Patient 19 and 20 (twins):

B. K., B. K., 7 months old, female, from Liwang

History: Started to vomit this morning. One girl once, the other three times. Mother worried they could have fever. Worried about vomiting. No diarrhoea, drinking at breast.

Examination: no dehydration in both children, abdomen soft, auscultation normal. Temp. one girl 36,4°C, the other 36,9°C

Diagnosis: mild gastritis, just started

Treatment: take breast milk in small portions frequently. Mother wants strong medicine. We offered her to stay around the camp and come to re-check whenever she wants. She did not show up again.

Patient 21:

U., 6 months old, male, from Goredi

*Weight:* 7kg (15th percentile – WHO Child Growth Standards)

History: Fever for three days, drinks well, no vomiting, no diarrhoea, no coughing. Severe rhinitis. Went to hospital one or two days before and got Paracetamol, Metronidazol and Zinc Sulfate.

Examination: severe Rhinitis, Temp. 36,4°C, otherwise healthy and smiling boy

Diagnosis: Rhinitis

Treatment: stop Metronidazol. Put breast milk in both nostrils several times a day. Vitamin C tbl. for mother (she does not eat fruit)

Patient 22:

A. B., 4 9/12 years old, male, from Liwang

*Weight:* 17kg (15-50th percentile – WHO Child Growth Standards)

*Height*: 103cm (15th percentile – WHO Child Growth Standards)

*Arm circumference:* -

*Haemoglobin:* 7.0 mmol/l

*Last Anti-Worm Tablet:* last 6month

*Last Immunization:*  ?

History: Two years history of vomiting when he has abdominal pain. Received diagnosis of ulcer in the liver (?).

Examination: little pain in liver region, otherwise abdomen fine, no pain. Caries

Diagnosis: Unclear diagnosis. Might have an Iron deficiency, too. If not getting better referred to a children’s hospital (Buthwal or Kathmandu).

Treatment: Iron and Multivitamins

Patient 23:

O., 7 month old, male

*Weight:* 7kg (3-15th percentile – WHO Child Growth Standards)

History: Diarrhoea since 7 days 4 times a day. Slimy stool, no blood. Otherwise healthy child, drinks well. No fever.

Examination: Abdomen soft, no dehydration, normal auscultation

Diagnosis: mild Gastroenteritis

Treatment: Nutrition rules. Mebendazol. If not getting better re-check for more treatment

Patient 24:

S., 2 ½ years old, female, from Liwang

*Last Anti-Worm Tablet:* did not have one

*Last Immunization:* ?

History: Wants a second opinion. Diarrhoea for 3 days, anti-diarrhoea medication from hospital (Metronidazol and Zinc Sulfate). Has stomach pain, feels uncomfortable. No fever, coughing, sometimes vomiting a little, drinks well, no eating. No change with Metronidazol

Examination: Temp. 36,2°C, abdomen soft, normal auscultation. Mild rhinitis, lungs normal.

Diagnosis: DD Adenoviral infection/ mild gastroenteritis/rhinitis/worm infection

Treatment: stop Metronidazol, give zinc sulfate, start Mebendazol. Nutrition instructions and Vitamin C chewing tabl.

Patient 25:

J., 9 years old, female, from Liwang

*Weight:* 23kg (3-15th percentile – WHO Child Growth Standards)

*Height*: 127cm (15-50th percentile – WHO Child Growth Standards)

History: Was ill two years ago, went to Kathmandu teaching hospital: rare disease (father told us), had to eat eggs regularly. Now for two years recurrent chest pain of her left upper chest and pain in the lower abdomen on left side. If in pain she cannot walk properly

Examination: left convex scoliosis of the vertebral spine, unilateral kyphosis right chest.

Diagnosis: Referred pain to the chest and abdomen because of scoliosis and insufficiency of her back muscles.

Treatment: Exercise one hour a day (walking, etc.). Father told us, that she is always better when she has her regular walk to school (two times a day 30minutes). If she does not have this, she has pain.

Patient 26:

S., 5years old, female

*Weight:* 14kg (3th percentile – WHO Child Growth Standards)

History: Skin infection since some days. Got ointment but this was not helpful.

Examination: Impetigo contagiosa both ears, head (occipital) and cheek right

Diagnosis: Impetigo contagiosa

Treatment: Clavam susp. (Amox. And Clavulana.) oral, Fusigen ointment 3x/day local

Patient 27:

Re-visit of patient number 18

Patient 28:

L. B., 28days old, male,

*Weight:* 3,5kg (3th percentile – WHO Child Growth Standards)

History: Meconium aspiration during delivery. The lungs had been sucked in a hospital. He is drinking at breast, gaining weight normally. Mother is worried, wants to have lungs sucked again and have chest X-ray. She has two disabled children at home

Examination: everything is fine at the moment. Breathing is normal, lung auscultation normal, Resp 66

Diagnosis: healthy boy at the moment

Treatment: carefully explained to mother. Vitamin C tbl. for mother (she does not eat fruit)

Patient 29:

O.S., 8 months old, male, from Liwang

*Weight:* 7,5kg (3th percentile – WHO Child Growth Standards)

*Height*: 68cm (15th percentile – WHO Child Growth Standards)

History: Little vomiting at the moment, but mother has already medicine from hospital – but she does not know which one. She wants a second opinion because she is worried that her son is not growing enough. He is drinking well.

Examination: everything normal in body examination

Diagnosis: healthy boy

Treatment: explained, that babies grow very quickly in the first 6 months and that this slows down afterwards. Nutrition of mother is essential during breast feeding.

Patient 30:

R. B., 4month old, female, from Liwang

*Weight:* 6kg (15-50th percentile – WHO Child Growth Standards)

History: Running nose, slight cough, drinks well, no fever.

Examination: rhinitis, lung auscultation normal.

Diagnosis: mild upper airway infection, viral

Treatment: Saline and mother milk in both nostrils, Vitamin C tbl. for mother

Patient 31:

Re-Visit of patient number 18

Patient 32:

A., 2 years old, male, from Liwang

*Weight:* 11kg (15-50th percentile – WHO Child Growth Standards)

History: Mum told us that the urine is „cloudy“ and that he has to go frequently to pee. Additionally abdominal pain, diarrhoea since yesterday 3-4x/day. Since today rhinitis. Drinks very well, no fever

Examination: Urine: looks clear, not smelly, protein +, Ketone +, otherwise normal

Abdomen soft, no pain or resistance. Rhinitis

Diagnosis: Probably just a viral infection

Treatment: Careful diet. Vitamins

Patient 33:

S.D., 6 years old, male, from Liwang

*Weight:* 16 kg (3th percentile – WHO Child Growth Standards)

*Height*: 103 cm (<3th percentile – WHO Child Growth Standards)

*Haemoglobin:* 6,6mmol/l

*Last Anti-Worm Tablet:* ? but not so long ago

History: Complains of headaches and abdominal pain, coming and going since two months. He lies down when he has headache, otherwise he plays normally.

Examination: Caries, inner side of eye lid is pale, Caries

Diagnosis: Iron deficiency

Treatment: Nutrition explained, Iron Supplement for 4-6 month

Patient 34:

S.D., 8 years old, male, from Liwang

*Weight:* 23kg (3-15th percentile – WHO Child Growth Standards)

*Height*: 118cm (15-50th percentile – WHO Child Growth Standards)

*Haemoglobin:* 8,0mmol/l

*Last Anti-Worm Tablet:* ?

*Last Immunization:* ?

History: For 4 months several episodes of blood in urine (haematuria) and „white“ urine. Haematuria is very painful. He had a herniotomia and appendectomy done in Kathmandu Hospital

Examination: Urine: clear, not smelly, pH 9, rest normal – no blood.

Abdomen soft, no pain. Conjunctivia have a little yellow touch, Caries

Diagnosis: probably kidney stones, which are very common in Rolpa. Needs a check-up in a children’s hospital with ultrasound.

Treatment: Referred to children’s hospital in Buthwal or Kathmandu

Patient 35:

R.K., 10 years old, male, from Liwang

*Weight:* 25kg (3-15th percentile – WHO Child Growth Standards)

*Height*: 120cm (<3th percentile – WHO Child Growth Standards)

*Haemoglobin:* 7,1mmol/l

*Last Anti-Worm Tablet:* ?

*Last Immunization:* ?

History: Dry cough for 3 years. Mother says „always“. Sweating a lot, also now. „Hot“ knees. No Tb-Check until now.

Examination: Sweating, lung auscultation normal, several small lymph nodes cervical, caries, eye lids are pale. Otherwise fine, no allergic signs

Diagnosis: Probably Tbc. Needs a Mantoux Test if it is not getting better with the anti-worm treatment. Additionally probably Iron deficiency.

Treatment: Albendazol, Iron. Refer to hospital if it is not getting better

Patient 36:

Re-visit of patient number 18

Patient 1 from hospital:

7years old, male, from Liwang

History: Just had slow motorbike accident with his father. He was sitting in the front. No vomiting, no amnesia, GCS Score 15. Hospital asks for check-up

Examination: little skin excoriation left frontal head, right clavicular. Complains of knee pain right, but walks normally.

Diagnosis: only small skin lesions after motorbike accident with father

Treatment: can be discharged. Needs to be admitted to hospital if starts vomiting in the next few hours.

Patient 2 from hospital:

2 days old, male

History: Sectio caesarea two days ago because he was lying head up in uterus. Now increasing fever since yesterday. Resp. normal, drinks.

Examination: Tachycardia 154`, Resp 66`, Temp. 38,8°C, no other infection signs. Lc 12`000, Neutro 60% - normal for age

Diagnosis: post-delivery infection

Treatment: next hospital 6-7 hours away with a very bumpy and windy road. Decision to start with amoxicillin and gentamycin as Nepal government health protocol says. But Gentamycin only 2mg/kg every 12 hours and not 5mg/kg as recommended.

Re-visit the next day (our last day):

Less fever than the day before, drinks well at breast. i.v. runs very well.