Die Hauptursachen sind Wirbeltuberkulose, Arachnoiditis, spasmodische tropische Paraplegie, Verletzungen, Lathyrism und Kompression des Rückenmarks. Die übliche Verletzung ist Fall von Bäumen und dar Gebrauch von trainierten Affen, sollte nicht unterlassen werden, um Blätter und Nüsse zu sammeln.

Der Autor hat circa 35 Krankenfälle von Paraplegie gesehen—4 sind davon beschrieben worden, 2 mit guten Resultaten und 2 mit schlechten.

Der Internist, der in einem Entwicklungsland arbeitet, soll sich für die Behandlung dieser Fälle vorbereiten. Er soll auch bereit sein, Personal, Patienten und Verwandte zu motivieren. Er wird finden, dass örtliche Medizinische Assistenten sehr freundlich und begeistert sind, und sie werden sehr schnell die notwendige Geschicklichkeit erwerben. Fast alle Krankenfälle sollten eine einfaches und billiges anti-tuberculose Regime sowie Vitaminen und auch eine sehr reichliche Diät erhalten. Notwendige örtliche Einrichtungen sollten gebaut werden, die nichts anders als einfache Unterhaltung erfordern.

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Extracts from an Essay on

THE HOME AND HOSPITAL NURSING CARE OF THE **CHRONIC PARAPLEGIC PATIENT IN NEPAL**

By TIKARAM RAI

'KATAI BAREE!' (Oh dear me!), exclaims Mrs Maita, 'however can he make such a journey over these evil mountains, when he can't even get outside his own back door?'.

'He will have to be carried, of course', replies Lal. 'You must try to arrange Surely you can find several strong young fellows to help you get him to it. hospital.'

'Brother', says Harka, 'there are such a few strong men left in the village, since almost all are away in some kind of "Service", that at this time of the year no one will agree to go. When the ploughing and field preparation is over in a month's time, we could perhaps arrange something.'

Lal looked at the verandah (downstairs) and decided he would try to prepare as comfortable as possible a bed for him there. So with the family's cooperation he collected several easily washed soft cotton 'shawls' for sheets, a new straw mat, 'rahri', *i.e.* locally woven blanket (from raw sheep's wool), two long-haired goat skins and three locally made pillows. He arranged these on the hard floor of the verandah (no bed-boards necessary!) but before moving the patient to his new bed, he gave him a thorough bath. The area over his sacrum was so red and sore that the skin was about to break down.

'Now', thought Lal, 'one of the biggest problems of keeping him here for a month is how to prevent pressure sores-and bad ones indeed.'

Now Lal turned his attention to the problem of his patient's incontinence. Very ingeniously and taking much trouble, he hollowed out a suitable piece of

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bamboo which, after suitably padding to prevent rubbing on the scrotum, he fitted the penis into. To this improvised 'urinal' he fitted a slightly larger bamboo cylinder and channelled the dribbling urine into an earthenware pot on the floor. (If the 'chindoh', gourd had been available in this village, this light-weight, narrow-necked, nature's water vessel would have been a simpler and more effective way of collecting the patient's urine and keeping a dry bed; for the patient could easily manage it himself.) After finding out from Mrs Maita that the patient nearly always moved his bowels soon after his morning and evenings meal, Lal decided to try putting a 'tapari' (deep plate made from big, strong leaves) under him for half an hour or so after meals. Thus he was often able to 'catch' his faeces and so prevent a messed-up bed. Lal dug a pit in the garden to bury his excreta and other refuse.

As Maita possessed no toothbrush or paste and there was no glycerine of thymol or other mouth-cleansing agents available, Lal made a natural toothbrush (by crushing the peeled end of a special strong twig). He ground a mixture of salt and charcoal and used this as 'Vim' to clean his coated teeth. Then he had him rinse his mouth well with salt water. He instructed his wife to have him do this every morning and wash his mouth out after each meal. (As it is important for the patient to eat well, his appetite needed to be kept stimulated, which would not be so with a dirty mouth.) He asked Maita's wife and relatives to give him as good food as possible, with plenty of protein, vitamins and calcium. He told them that milk, curd, meat and eggs were especially good but as these are not plentiful in a village home, he urged them to give him soyabeans in some form every day. Beans, peas and all lentils are also rich in proteins and minerals, while wheat and millet are more nutritious for the staple food than rice or maize. When raw soyabeans are sprouted (by keeping them on a damp cloth for several days) they contain everything that the human body needs. (Vitamin C and some B are destroyed in cooking or roasting but increased by 'sprouting'.)

Every day Lal took time to read or talk to his patient and he also lent him his radio/tape-recorder to listen to. Each morning he turned him towards the outside so that he could see the sun rise over the Himalayas, shining over his beautiful mountain village. He could also watch what everyone was doing. So during the weeks before Maita Singh could have proper hospital nursing, up there in his primitive village home Lalbahadur developed an effective routine for nursing his patient:

- 6 a.m.—General nursing care: disposal of collected urine, pressure areas, face wash and mouth care.
- 6.30 a.m.—Change position (to face outside). Deep breathing and limb physiotherapy.
- 7 a.m.—Nourishing food or drink.
- 7.15 a.m.—'Bedpan' and bed-making—taking care to remove crumbs and wrinkles etc.
- 7.30-9 a.m.—Radio and/or reading.
- 10 a.m.—Pressure areas and position change.
- 10.30 a.m.—Morning meal and mouthwash afterwards.
- 11 a.m.—'Bedpan'.
- 11.30 a.m.—Sit patient out leaning over his sack (sometimes his bowels opened at this time). Encourage deep breathing and his wife or son to massage his legs etc.
- 12.30 p.m.—Back to newly made 'bed' to sleep for an hour or two.

2 p.m.—Pressure areas and position change.

2.30 p.m.—Nourishing food or drink.

3 p.m.—Radio etc.

4.30 p.m.—Physiotherapy

5.30 p.m.—Evening meal and mouthwash

6 p.m.—'Bedpan'.

7 p.m.—General nursing care (as in morning).

8 p.m.—'Fellowship' with friends and neighbours.

9 p.m.—Milk drink (if possible).

9.30 p.m.—Settle for the night after final rub of the buttocks and heels and straightening the bottom sheet etc.

Wife should be taught to change his position once during the night.

At last, 5 weeks later, when they arrived safely at the hospital, Lalbahadur could hand over his heavy nursing tasks to a staff and surroundings which were geared to his patient.