A Case Study

Tetanus in North Bihar

By **Marina Lall**

Kapil, a 1½ year old boy, was admitted to the Hospital. He was diagnosed as ? tetanus or ? meningitis.

Past History : Kapil had been suffering from an ear infection several days previously and had had some treatment at home but he had become very unwell and started to have spasms.

On Admission : Kapil was very stiff all over and was complaining of a painful neck. He was having fairly severe spasms. Soon after arriving, his breathing stopped and artificial respiration was immediately given and the breathing restarted. An injection of Sparine 25 mgs was given with little effect at 8.45 a.m. Intra-muscular Betnesol 2 ccs was given at 9 a.m. and it was charted to be given 12 hourly.

The child was transferred to the tetanus ward and a routine dose of Antitetanus Serum 750 units was given and it was to be repeated daily for 3 days. Intra-muscular Sparine 25 mgs was to be given 8 hourly, and Sodium Gardenal 100 mgs p.r.n. Crystallin Penicillin 250 units was given 8 hourly, Streptomycin 1 gram daily.

Position : The foot of the bed was raised on high blocks to help the drainage of secretions by continuous postural drainage.

First Day : The child was fairly quiet, so a Ryles tube was passed but he had more spasms straight away and his breathing stopped again. Artificial respiration was given and the Ryles tube removed. Breathing re-commenced and an airway was inserted to keep the airway clear. At 10.15 a m. the breathing stopped again and was re-started with artificial respiration. An injection of Sodium Gardenal 100 mgs was also given.

The Case Study was initially recorded in Hindi by Miss Marina Lall while she was working in the Tetanus Ward at the Duncan Hospital, Raxaul, Bihar.

For a short while all was peaceful but at 12 mid-day spasms started again and the breathing stopped and was re-started. An injection of Betnesol 2 ccs was again given under doctor's orders. Secretions were removed from the mouth with an electric suction machine as necessary. Kapil's position was changed from side to side 4 hourly very gently but no other nursing care was given.

During the afternoon he was quieter but although Sparine was given at 5 p.m. the spasms again became severe and at 6 p.m. the doctor ordered an injection of I.V. Valium 5 mgs which had a good effect. His diagnosis was confirmed as Tetanus.

Subcutaneous fluids of Saline with Hyaluronedase 1500 international units (to help absorption) 500 ccs was ordered and it ran slowly into the tissues. The evening temperature per axilla was 37.8°C. At 11 p.m. Sodium Gardenal 100 mgs was given as the spasms were increasing but breathing stopped again and was restarted with difficulty. Betnesol and Sparine were given as ordered above and the child rested better during the remainder of the night. I.M. injection Valium 5 mgs was given at 12 midnight. This drug was now ordered 6 hourly.

Second Day : At 6 a.m. mouth-care was given and I.M. Valium injection 5 mgs. the subcutaneous fluids had finished and rectal fluids of ½% Glucose 1% saline were ordered to run slowly. Other medications were given as ordered the previous day.

Kapil was resting well but the chest secretions were increasing and there was some difficulty in breathing. Four hourly steam inhalation were ordered and these were given in a steam tent around the head of the bed. An electric stove and jug of tincture of Benzoin were used and a nurse always stayed with the child throughout this procedure. The sucker was used as necessary. No further nursing procedures were carried out as the child was so ill and his position was not changed on this day. Sedation was continued as ordered and antibiotics as before.

Third Day : Kapil remained very seriously ill and was very "chesty". Inhalations were continued 4 hourly. Mouth care was given and his position was changed very gently 4 hourly but otherwise no other nursing care was done. When urine was passed in the bed, sheets were changed as necessary. His temperature was normal and the antibiotics were changed to Seclomycin (Streptomycin/procaine Penicillin) 1 c.c., b.d. Sparine was reduced from 8-12 hourly. Spasms continued but the child seemed well sedated. Sodium Gardenal was given p.r.n. Subcutaneous fluids were given.

Fourth Day : There was little change in his condition and during the morning the spasms became worse again, so Sparine was again changed to 8 hourly. Rectal fluids were given 500 ccs.

Kapil's chest remained congested, his temperature was 38°C, his position was changed 4 hourly but whenever he was touched he had severe spasms. Inhalations were continued 4 hourly.

Fifth Day : Kapil seemed very weak and spasms were very frequent. Sedation was given as before and on alternate days subcutaneous fluids and rectal fluids were given. The bowels had not been opened for several days.

Sixth and Seventh Days : There was a slight improvement in his condition and his position was changed 2 hourly and back care given 4 hourly and a bath was given and mouth care done. Inhalations were given p.r.n. when he was very "chesty." Spasms continued during the day but he rested better at night.

(Contd.)