**DEFORMITIES OF HIP IN
POLIOMYELITIS-CLINICAL ASSESSMENT**

Dear Editor,

I have often seen students, undergraduate as well as postgraduate, getting confused while assessing the flexion and abduction deformities of the hip affected by poliomyelitis. The problem peculiar to polio is that the commonest deformity of flexion and abduction at the hip is due to soft tissue contractures (most important being the iliotibial band).

The iliotibial band is responsible for both flexion and abduction at the hip [1,2]. This means that once the hip is kept in abduction, the iliotibial band will relax and therefore the other deformity, flexion, will not be noticeable. Similarly when the hip is kept in flexion, the abduction deformity at hip will be masked due to the same reason. This situation leads to confusion in the mind of the person examining the patient.

To solve the above problem I propose a method of clinical examination which I have found foolproof and scientifically correct. The method is as follows :

The patient lies supine on the couch. Usually the limb will be abducted and externally rotated. The lumbar lordosis may not be found exaggerated. Similarly the pelvis may or may not be found tilted. The first step should be to make the pelvis square (i.e. both anterior superior iliac spines at the same level) by hyper-abducting the affected limbs or by holding the pelvis with both hands and then tilting it. Once the pelvis is square, the affected limb is held in neutral rotation by one hand and the other hand

fixes the pelvis. The limb is now gradually abducted till the point that the pelvis starts moving. This will show the exact amount of abduction deformity at the hip.

For detecting the flexion deformity, the affected limb is placed in the hyperflexed and neutrally rotated position. The moment the limb is flexed, the abduction component of the deformity disappears due to relaxation of iliotibial band. Now the limb lies in the sagittal plane which is the correct position of the limb to judge the flexion deformity which is in sagittal plane.

Now the other limb is flexed completely. This does two things. Firstly, it keeps the lumbar spine flat and secondly it stabilizes the pelvis from rolling forward. Now, gradually extend the affected limb at the hip, and stop the moment the pelvis is felt rotating. In other words, we elicit 'Thomas' test while supporting the affected limb in the sagittal plane. By this method the exact amount of flexion deformity of the hip can be ascertained which otherwise is masked when the hip rises in the usual attitude of abduction.

REFERENCES

1. Beaty JH. Paralytic Disorders. In : Crenshaw AH, editor. Campbell's operative Orthopaedics. 8th ed, St. Louis : Mosby Year Book 1992; 2413-14.
2. Tachdjian MO. Paediatric Orthopaedics Vol-3. 2nd Ed Philadelphia : WB Saunders 1990; 1921-22.

Sqr Ldr PK AGARWAL
Reader, Dept of Orthopedics
AFMC, Pune - 40.

**RESURGENCE OF MT MALARIA IN THE
NORTH EAST**

Dear Editor,

I have gone through the paper titled, "Resurgence of MT Malaria amongst troops serving in the North East". Medical Journal of Armed Forces India 1994; 50 : 5-9 and critics reply published as letter to Editor in MJAFI, 50; 4 : 306-7.

I want to share some of my experience with you. While I am fully in agreement with Lt Col A Banarjee and author's reply thereto (Wg Cdr SK Krishnan), I want to make two observations.

While agreeing with the probability of Chloroquin resistance in MT malaria, I would like to draw your attention to the possibility of both Chloroquin and Quinine resistance in MT malaria and the bizarre presentation.

There was a resurgence of MT malaria in 1973-74 in troops located in Arunachal Pradesh and Mizoram particularly in paramilitary forces including Border Roads Organization. It was apparent that time that the MT malaria were chloroquin resistant and all cases reporting with fever (whether blood slide showed presence of malaria or otherwise) were treated with Inj quinine hydrochloride. The General Reserve Engineering Force personnel were not protected with suppressive treatment as possible with regular Army. Personal protection was given more importance and curative treatment with antimalarials was restricted only to cases showing presence of malaria parasites in peripheral blood. The mortality showed a definite reduction.

The second aspect is the use of suppressive treatment. Weekly intake of chloroquin may not be ideal as this gives a false sense of protection where individual soldiers compromise personal protection and nothing is more deplor-