CASE REPORT

AN INNOVATIVE TECHNIQUE TO CUT AND EXTRACT LOOSE BENT KUNTSCHER NAIL
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ABSTRACT
Removal of a grossly deformed nail can be a serious and perplexing problem. We report an innovative technique to cut and extract a loose bent Kuntscher nail. The technique is simple and effective; can be used in peripheral hospitals where advanced gadgetries may not be present.

KEY WORDS: Kuntscher nail, Transection, Extraction

INTRODUCTION
Intramedullary nailing has been a widely accepted method of treatment of fixation of fractures of femoral shaft. Bending and breaking of the nail are the most important complications specific to the concept. These complications are more prevalent if the fracture is unstable, goes to nonunion, implant is smaller in size or patient has refracture. Removal of a grossly deformed intramedullary nail can be a serious and perplexing problem.

We were recently faced with the problem of removing a loose and bent (about 35°) ten millimeters stainless steel Kuntscher nail in a 45-year old male with nonunion lower third of femur (Figure 1). The Kuntscher nailing was done 6 months back in a peripheral hospital and was referred to our tertiary center for further management after having a fall. Manipulation under anaesthesia, to straighten the nail in-situ failed as the nail used to rotate inside the medullary cavity with external force. Relevant literature was scanned. Hacksaw with blades and a steel drill were arranged to transect/weaken the nail, but following innovative approach was used.

TECHNIQUE
There was a butterfly fragment at the nonunion site and bone grafting was contemplated in the case, we took advantage of both the factors. The nonunion site was exposed with a 7.5-centimetre, long skin incision, the butterfly fragment with its soft tissue attachments was tilted with the help of a Kocher’s forceps to expose the underlying nail. As the nail was of smaller diameter, an attempt was made to straighten it with a small punch and hammer before venturing into a more cumbersome method of transecting or controlled weakening of nail with drill. Instead of getting straight, nail got crumpled and we were able to cut with the help of a jumbo-pin cutter (Figure 2). Both parts of the nail were removed through the non-union site, as they were lying loose in both fragments. Biological osteosynthesis was achieved with a 12 hole AO/ASIF 95° condylar plate after giving two separate small incisions, under image intensifier control. Bone grafting was done at nonunion site.

DISCUSSION
An intramedullary nail imparts stability for a limited period of time until bone healing is attained. Complications like bending and fatigue failure of implant add to the woes of nonunions, delayed unions or refractures. Standard accepted method of treatment of a bent nail is to straighten it in-situ; remove it from proximal end; and go for exchange nailing.2 Opening the fracture site and transecting3,4 or controlled weakening of the nail before removal5-7 are the options available, if one is not able to straighten the nail in-situ through application of a substantial external force.

Procedures like transecting or drilling the nail produce metal debris and there are chances of shattering of discs/burrs, drill bits or hacksaws. Soft tissues may be contaminated with metal debris and thermal necrosis of soft tissues and bone can occur due to heat generation while transecting or drilling.

In the present case, it is hypothesized that nonunion caused the nail to fail. Six months duration is sufficient for a femoral diaphyseal fracture to heal. In the given circumstances,
instead of unlocked intramedullary nail surgeon should have opted for locked intramedullary nailing or other suitable methods of osteosynthesis. We removed both the fragments of nail through nonunion site, as they were lying loose in both proximal and distal ends of bone. No extensive dissection or periosteal stripping was required due to presence of butterfly fragment. Otherwise; we recommend standard method of removing Kuntscher nail through proximal end after straightening or transecting it.

Our method is simple and effective, as it does not produce metal debris and heat while cutting, allowing extraction of the bent nail. It may be useful even in high strength nails to produce sufficient weakening to straighten by manual manipulation; in the event one is not able to transect the nail completely. The procedure has also its application in peripheral hospitals, where advanced gadgetries for transecting the nail may not be present.

REFERENCES

LETTER TO EDITOR

QUALITY DRUGS IN ‘STRIP PACKING’ CONSTITUTES AN ESSENTIAL COMPONENT OF MEDICAL CARE RIGHTS

Sir,
The maintenance of the drug quality is an essential component of medical care. This letter argues that the right of a patient to ‘quality drugs’ in ‘strip packing’ construes an essential component of the ‘Right to life’.

In a landmark judgement, the Supreme Court of India has upheld the right to health and medical aid of a worker according to Article 21, Articles 39(e), 41, 43, 48(a) of the Constitution as a fundamental right. Justice Agrawal had also ruled that government health services have to provide adequate treatment to all citizens’ and its denial violates the right to life and is compensable under Articles 32 and 226. In two other cases, the Court had directed reimbursement for unavailable treatment facilities in government hospitals and had banned quackery.

In 1987, in response to a Public Interest Litigation, the Court had among others, passed stringent directions on maintenance of drug quality standards and had emphasised exemplary punishment for breaches. The reporting of sub-standard drugs in India is a routine matter, for instance, The Centre for Science and Environment had reported of seizure of spurious life saving antibiotics as Netromycin in 2002. While browsing the Food and Drugs Act (FDA) Maharashtra site, disturbing statistics of spurious and sub-standard drugs are seen. In 2003, a task force had detected many spurious and sub-standard drugs of reputable firms, including multinationals; unearthed unlicensed medical shops and violations; and seized millions of Rupees worth of drugs and equipment.

On Dec. 18, 2003, the Times of India and a Press Release by the Ministry’s website announced, the Union Cabinet’s approval to amend the Act to provide death penalty for those involved in manufacturing, selling and dealing with fake drugs and making it a non-bailable offence. On January 15, the Federation of Medical and Sales Representatives’ Associations of India handed to the President of India, a memorandum bearing 2 million signatures from people against the menace of spurious drugs. Genuine Pharmaceutical Manufacturers have expressed similar sentiments as they are economically affected. The Mashelkar committee set up in 2002 has also recommended the death penalty for spurious drug manufacturers, earlier it varied from a five years prison term to life imprisonment.

A news item by Times of India, on Jan. 17, 2004, had reported of a prestigious drug company, which was producing spurious Dexamethasone tablets. The tablets were marked with ‘G’ symbol, indicating that they