

MANAGEMENT OF OSTEOMYELITIS

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It is one of the important diseases of childhood; it may also occur in adults. Osteomyelitis means inflammation of the bone and its central cavity. It most commonly affects the femur and the tibia. Among, rest of the bones, those most often affected are, in order of frequency, the humerus, ulna, fibula, radius, metacarpals and the metatarsals.

As mentioned above, the disease is commonest in children and young people. This is particularly at puberty (10-14 years). This seems to be because of the fact that the active bone growth takes place at this time of life, as well as the frequency of injuries at this age. The male children are the chief sufferers, though females are also affected.

It is caused by infection of the bone with pyogenic organisms most commonly the staphylococcus, less commonly the streptococcus or pneumococcus or typhoid bacilli.

A minor injury to a bone also renders it vulnerable to infection by organisms circulating in the blood.

The organisms, usually reach the bone through the blood stream from a septic focus elsewhere in the body (Haematogenous Osteomyelitis). Generally the inflammation begins in close to the epiphyseal cartilage where growth is proceeding, as the soft new tissue is favourable situation for the growth of bacteria. An abscess is formed, from here the infection spreads to the medullary cavity of the diaphysis, or shaft and also outwards along the epiphyseal disk to beneath the periosteum. The inflammation increases, pus is formed and by and by the parts of the bone die. If this pus is not evacuated by surgical means it ultimately, forces its way to the surface of the body and escapes. The muscles, ligaments or fascia—the surrounding tissues—may become involved and infection may as well be carried, by blood, to other parts of the body.

In the haematogenous osteomyelitis the infection begins in the metaphysis of the long bone thence it may spread to involve a large part of the bone. Pus is formed which soon makes its way to the surface of the bone, where it forms a subperiosteal abscess, later on, this abscess might penetrate the soft tissues and discharge at the skin surface. This infection often becomes chronic, if not controlled in its acute stage.

We have been blessed by the Nature with the wonderful capacity for recovery of the bone. When the pus is evacuated it begins to grow again, the periosteum and bone marrow laying down new bone round the dead parts. The latter ultimately becomes loose from the new tissue and have to be removed by operation. Though it is very rare for the bone not to be reproduced, but in case if it happens the condition becomes chronic. In such

cases its victims suffer periods of acute exacerbation, and discharging sinuses may persist.

Usually the onset is rapid. The acute disease is attended by high fever, severe pain, increased white blood cells count, swelling of the limb, and sometimes delirium. These symptoms may be serious or even fatal.

On investigation you might get a recent history of boils or pimples. Patient complains of great pain over affected bone. If some superficial bone is affected marked swelling will be one of the early symptoms. Fluctuation may be apparent. Tenderness near the end of the bone in the metaphysial region present. In early stage skin appears to be white then red and angry looking.

In some cases complicating septic arthritis is present then movement would be greatly restricted and painful.

While doing radiographic examination you will see that in early stages radiographs do not show any alteration from the normal but after 2 to 3 weeks visible changes appear—if timely and proper treatment is administered these changes can be avoided very well. Radiographs may show diffuse rarefaction around the metaphysial area and new bone outlining the raised periosteum. When patient comes in chronic stage radiographic study may show that the bone is thickened and show irregular and patchy sclerosis which will give a honeycombed appearance. If a sequestrum is present, it will appear as a dense loose fragment with irregular but sharply demarcated edges, lying within a cavity in the bone.

Complications: The important complications are involvement of joints, spontaneous fractures, displacement of epiphysis, retardation of growth from damage to the epiphyseal cartilage, involvement of organs (liver, spleen, kidneys or heart may become diseased). In chronic stage Amyloid disease may complicate long continued chronic osteomyelitis with continuous profuse discharge of pus.

As a result of displacement of the epiphysis the limb may be shortened or overgrowth caused by hyperaemia may result into the lengthening of the limb. In either case deformities such as talipes valgus or varus, or club hand, ankylosis or dislocation of the joints may also be resulted in long standing disease.

Treatment: Efficient treatment must be begun at the earliest possible and if efficient treatment is installed infection can very well be controlled. Thus late results can be avoided.

Fatal cases are those in which general symptoms predominate—this is known as Fulminating type of osteomyelitis. In recent years only, the mortality has been reduced from 20 per cent to less than 1 per cent.

Main principle of the treatment should be the control of the infection. Rest should be advised essentially along with the Homœopathic treatment which will, of course, be based on the totality of the symptoms.

In treating such cases a perfect, harmonious and cooperative approach of the surgeon and physician is a must.

When pus has caused increased tension, then to minimize the risk of bone necrosis from interference with its blood supply, an incision should be made down to the bone and subperiosteal pus is evacuated. Sometimes it becomes necessary to drill two to three holes in the bone to improve drainage of the pus. In most of the cases wound is sutured and thereafter the limb is splinted until the infection is overcome.

Homœopathic Approach :

Following are the most important remedies for combating the disease.

Aconite, Chin. s.; Calc. carb; Gun powder; Phos.; Silicea etc. Dr. Lilienthal has recommended Iodine and Calc. carb in alternation with each other.

Surgical treatment: as discussed above incisions are made to evacuate the pus, but in cases where there is persistent and profuse drainage of pus, a more extensive operation is called upon. Main aim being the removal of infected dead bone (sequestra) and to eliminate abscess cavities within the bone by derroofing and 'saucerising' them. This type of operation is called 'SEQUESTROTOMY'.

When the bone has been extensively destroyed bone grafting is done—bone grafts are inserted into the gap, e.g. patient's own fibula may be used to replace parts of tibia, humerus femur, or sometimes chips of cancellous bone are also inserted into the gap.

Physical treatment :

General aims of the physical treatment in these cases are strengthening of muscles, and regaining mobility of the joints. From physiotherapeutic point of view such cases are categorised into two types: (i) cases with unhealed or recently healed wounds, and (ii) old cases with wounds long healed. For first type of cases the treatment is begun very gently and carefully. Patient is taken in confidence, this is very important because most of the patients are weak, nervous and apprehensive.

Gentle manual massage is given, well away from any of the wound.

In remedial exercises, the patient is encouraged from the very beginning to do the active movements, sometimes it might become necessary for the physiotherapist or the operator to assist the patient in performing these movements. Date of weight bearing and then re-education in walking is started on instructions from the surgeon in-charge.

Zinc ionization, using soaked ribbon gauze packed in to the wound may be advised for unhealed wounds. This being an acutely painful treatment sometimes only ultra violet irradiation is advised in place of ionization for obtaining healing.

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fession more for his foreign qualifications in the orthodox school of medicine, misquoted the organon of medicine to preach that Hahnemann did *not* denounce either polypharmacy or massive doses. Regarding polypharmacy he quoted the following lines from the introduction to the organon:

"Even in real cures by means of mixtures of medicines it will be found that the remedy whose action predominated was always of a homœopathic character."

And from that he wanted the audience to deduce that even when several medicines are given to a patient in a mixture, it will cure him if only one of the medicines bore a homœopathic relationship to the case!

I do not know why this gentleman omitted to quote the words "which were *excessively rare*", (italics mine) in the same sentence and also seemed to take *no notice whatsoever* of the footnote to aphorism 272 where Hahnemann *earnestly deprecates* polypharmacy.

I could quote several illustrations like the above, but for space. My only object in writing this article is to warn the profession that unless such loose and distorted versions (particularly those coming from persons who have somehow managed to come to be held in esteem by a section of the profession and the public alike) are challenged from every platform, interested quarters (of which there is no dearth) will take advantage of them to vitiate true homœopathic practice to the great mischief of the suffering humanity. I strongly feel that it is high time to cry a halt to any more distortions and to preach organon to the majority of the profession itself in a logical and scientific manner, so that they may keep the banner of true homœopathy ever flying without falling victim to the various enticements mentioned by the learned Editor of the The H. Gleanings in his article already referred to.

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In later cases important aim is to restore the power of the muscles, release of contractures, gait training.

The whirlpool bath, if available, is useful in these late cases. Chlorine or iodine ionization is also sometimes given.

In the last let me repeat that for perfect management of such cases a perfect understanding and mutual cooperation of a surgeon, physician and physiotherapist is very essential.
