Manage TB
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Lecture - 08
Clinical manifestations of TB
Session 03

Welcome to session 3 on Clinical manifestations of Tuberculosis, urogenital TB.

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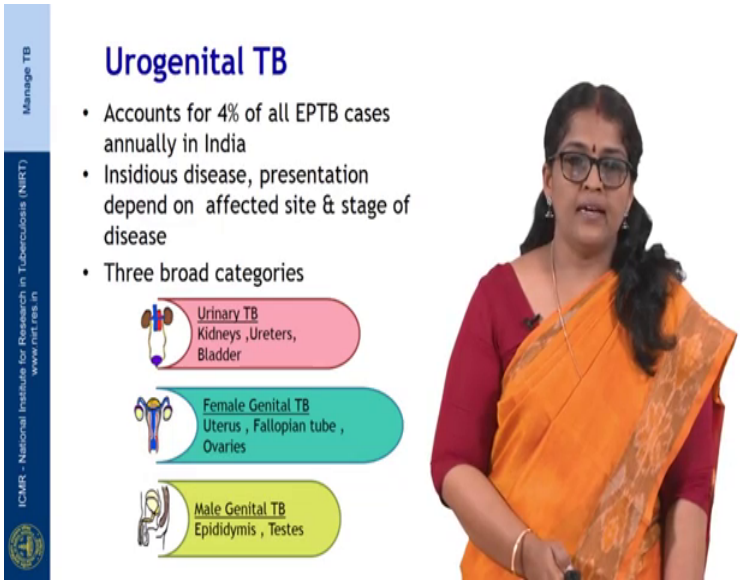

Urogenital TB refers to, TB of the male and female genital tract and the unary tract. This accounts for 4 percent of all EPTB cases annually in India. Usually, it is of it is an insidious disease; presentation depends on the affected site and stage of the disease.

It is there are three broad categories of urogenital TB. Unary TB, which refers to TB of kidneys, ureters and bladder. Female genital TB, which refers to TB of uterus, fallopian tube and ovaries and male genital TB effecting, the epididymis and the testes.

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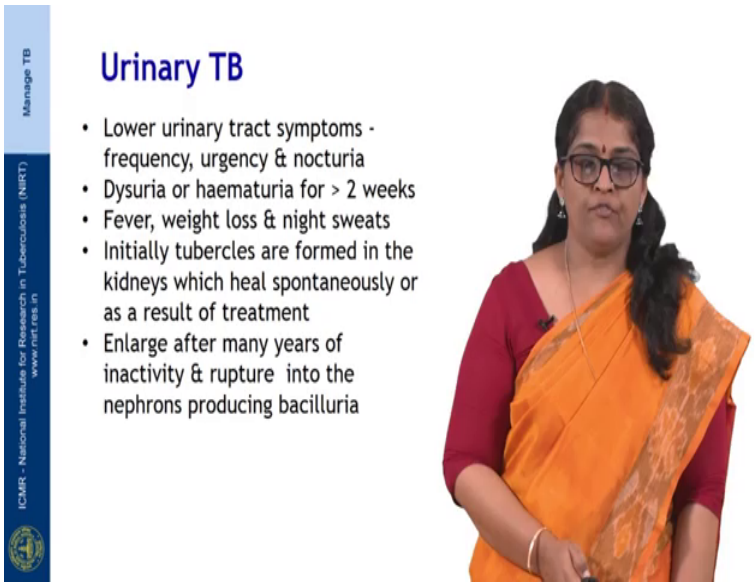

So, the urinary TB usually presents with lower unary tract symptoms like frequency, urgency and nocturia, dysuria or hematuria for more than 2 weeks, not responding to antibiotics fever, weight loss and night sweats, which may be present.

Initially tubercles are formed in the kidneys, which heal spontaneously or as a result of treatment and they may enlarge after many years of inactivity and rupture into the nephrons producing bacilluria.

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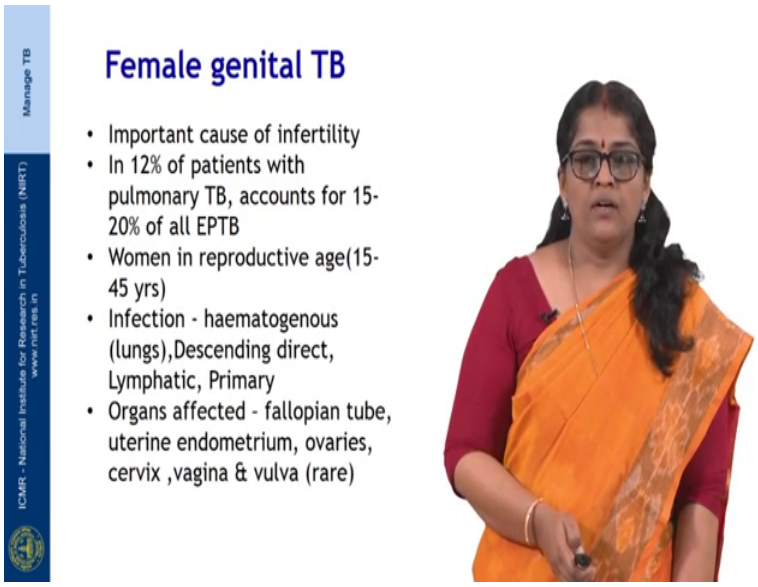

Female genital TB; this is an important cause of infertility, this is seen in 12 percent of patients with pulmonary TB and accounts for 15 to 20 percent of all extra pulmonary TB. Women in reproductive age groups, it is 15 to 45 years are the most affected, infection can occur through four main routes hematogenous, where the primary pathology is in the lungs, descending direct, lymphatic and very rarely primary infection can occur due to sexual transmission.

The organs affected a fallopian tube, uterine endometrial and ovaries and very rarely cervix, vagina and vulva are also affected.

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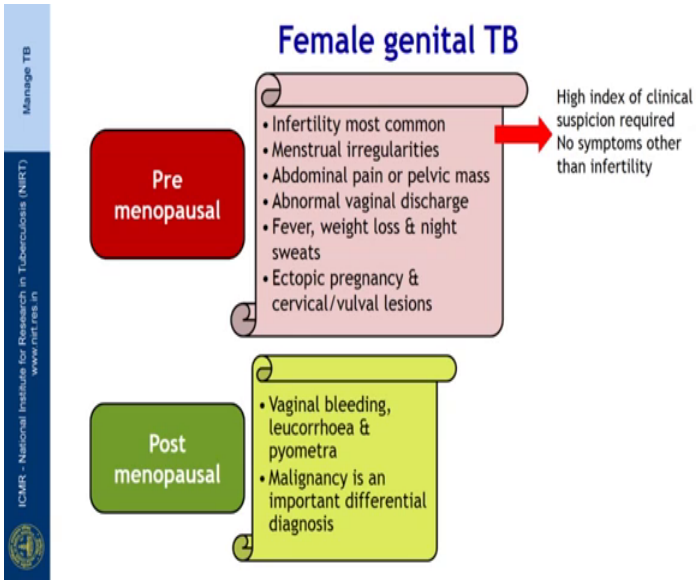

Female genital TB is usually asymptomatic. In premenopausal women, infertility is the most common presentation, menstrual irregular can also happen in the form of menorrhagia, metrorrhagia, hypomenorrhea, dysmenorrheal.

They may be abdominal pain or presence of pelvic mass, abnormal vaginal discharge, can also be there. This fever, weight loss and night sweats, ectopic pregnancy and cervical or vulval lesions are rare presentations.

So, a high index of clinical suspicion is required, because no symptoms other than infertility may be present. In postmenopausal women, this vaginal bleeding, leukorrhea and pyometra and malignancy should be an important differential diagnosis in these cases.

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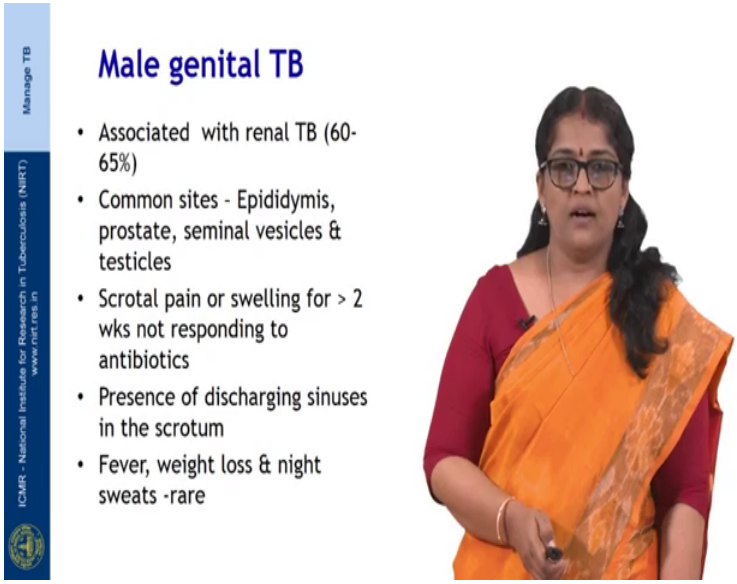

Now, coming on to male genital TB, this is associated with renal TB, 60 to 65 percent of the cases. The most common sites affected are epididymis, prostate, seminal vesicles and testicles.

Patients may present with scrotal pain or swelling for more than 2 weeks not responding to antibiotics, this presence of discharging sinuses in the scrotum. Fever, weight loss and night sweats are rare.

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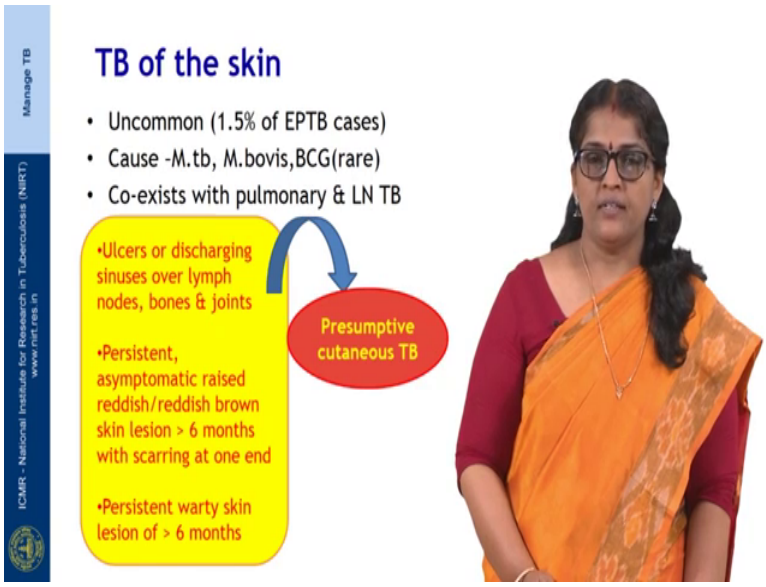

So, coming on to TB of the skin, this is very uncommon, it accounts for 1.5 person of all EPTB cases. The main causes mycobacterium tuberculosis and mycobacterium bovis and very rarely, it can also be caused by BCG. This usually coexist with pulmonary and lymph node TB.

Patients presenting with ulcers or discharging sinuses over lymph nodes, bones and joints, a persistent, asymptomatic rays reddish or reddish brown skin lesion more than 6 months duration, with scarring at one end and persistent watery skin lesion of more than 6 months duration should be evaluated for presumptive cutaneous TB.

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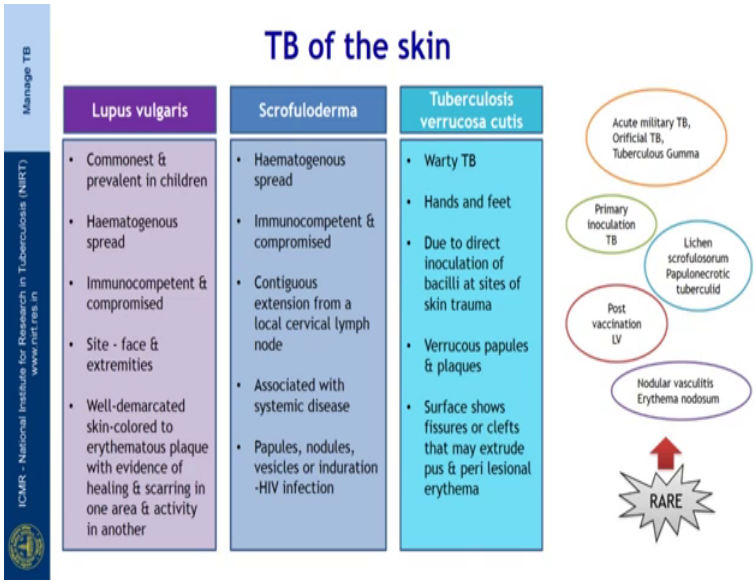

TB of the skin, the most common manifestations are lupus vulgaris and scrofula derma. Lupus vulgaris is communist and is prevalent in children, the spread is usually hematogenous, it can be seen in both immunocompetent and immunocompromised. The common sites affected are face and extremities and the lesions are well demarcated skin color to erythema test plaque, with evidence of healing and scarring in one area and activity in another.

The other common manifestation is scrofuloderma, this also occurs through hematogenous spread, it can be seen in both immunocompetent and immunocompromised. It can also arise due to a contiguous extension from local cervical lymph node; it is associated with systemic disease.

In HIV infection, we may see papules, nodules, vesicles or indurations. The third variety is tuberculosis verrucosa cutis, this is also known as warty TB, it affects the hands and feet. This is due to direct inoculation of bacilli at sites of skin trauma, varrucous papules and plaques are seen and the surface shows fissures of cliffs that may extrude pus and perilous erythema is present.

The other rare varieties include nodular vasculitis and erythema nodosum, post vaccination lupus vulgaris, lichin scrofulosorum and popolo necrotic tuberculid, primary inoculation TB, acute miliary TB, orificial TB and tuberculous gamma.

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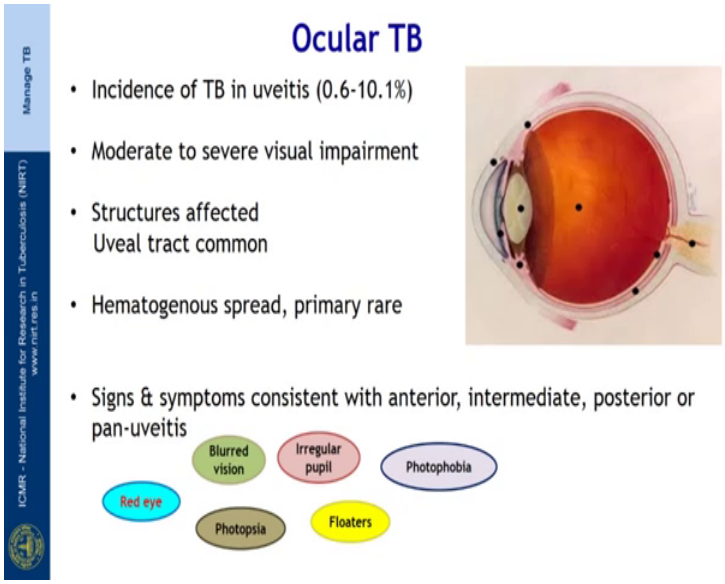

Next is ocular TB, the incidence of TB in patients presenting with uveitis, ranges from 0.6 to 10 percent. This may cause moderate to severe visual impairment, almost all structures in the eye are affected, the most common ones include uveal tract and the choroid.

The spread is hematogenous, primary infection is very rare, signs and symptoms are consistent with anterior, intermediate, posterior or pan uveitis. It includes red eye, blurred vision, photopsia, irregular pupil, floaters and photophobia.

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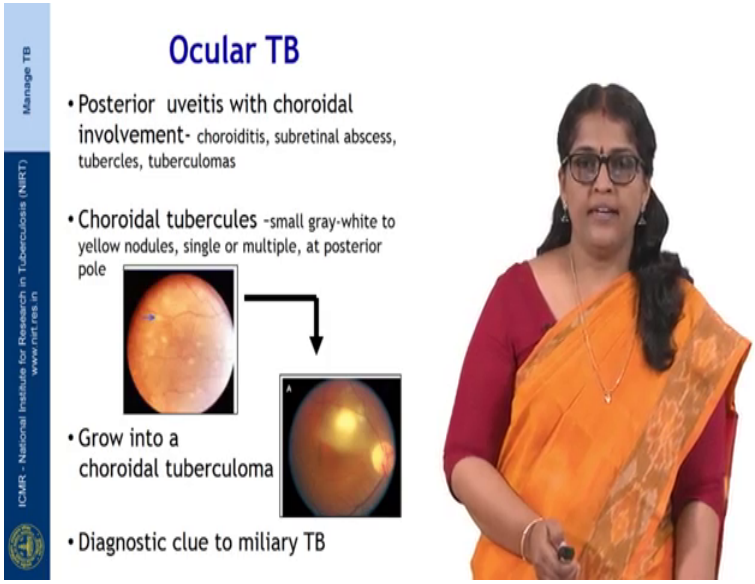

Ocular TB, the most common manifestation is posterior uveitis with choroidal involvement. The choroidal involvement is in the form of cordites, subretinal abscess, tubercles and tuberculomas.

Choroidal tubercles are small grey to white, to yellow nodules, which are single or multiple, seen at the posterior pole. These may grow into a choroidal tuberculoma and the presence of choroidal tuberculoma, may be diagnostic clue to miliary TB.

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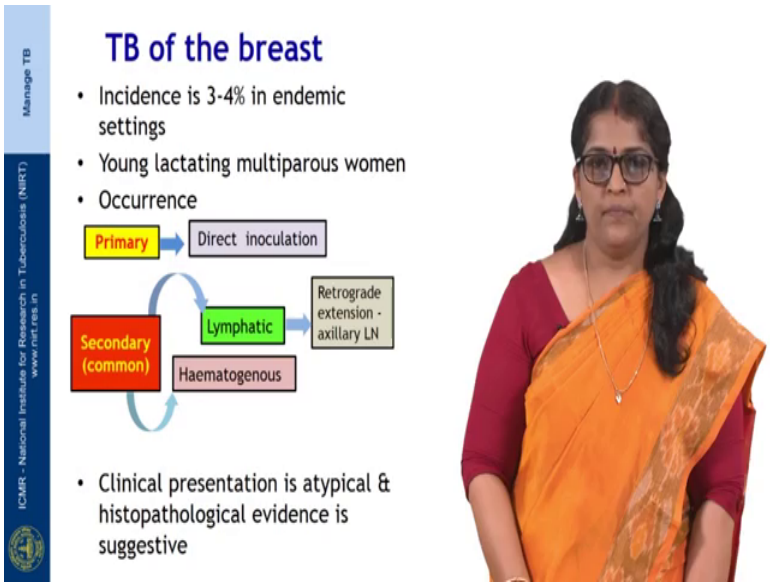

TB of the breast; the incidence is 3 to 4 percent in endemic settings, it usually affects the young lactating multiparous women. It can occur either as a primary infection or as secondary infection, which is more common. Primary infection is due to is through direct inoculation of the breast, by mycobacterium tuberculosis, through screen abrasions, secondary which is more common can occur either through lymphatic or hematogenous route.

Retrograde extension from the axillary lymph node, is the most common route. Clinical presentation is atypical and histopathological evidence is suggestive.

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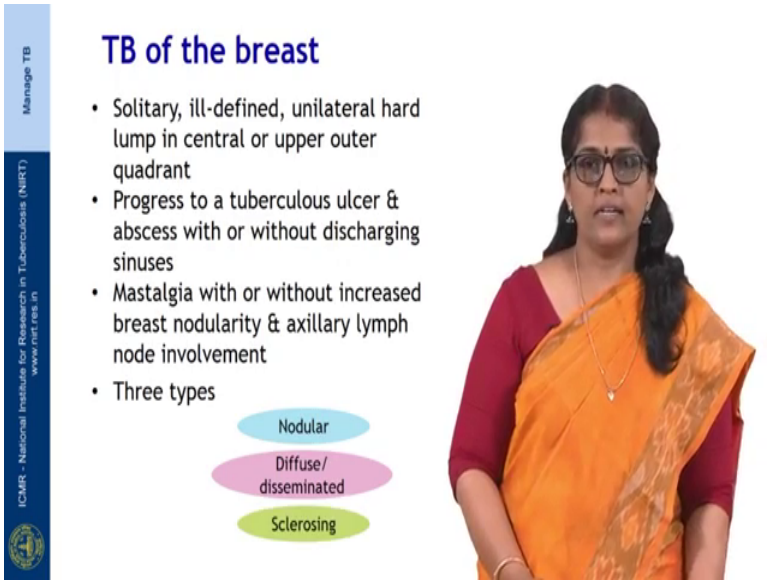

TB of the breast, usually presents as solitary, ill defined, unilateral hard lump in central or upper outer quadrant of the breast, thus if this becomes indistinguishable from carcinoma breast.

This can progress to a tuberculous ulcer and abscess with or without discharging sinuses. Patients may present with mastalgia with or without increased breast modularity and axillary lymph node involvement is also seen. Based on the clinical pathological and radiological features three types are identified nodular, diffuse or disseminated and sclerosing.

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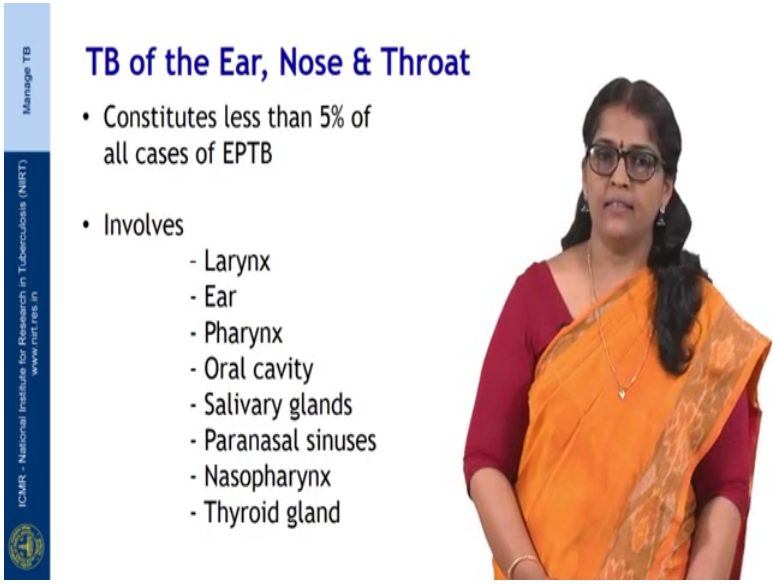

Now, coming on to the TB of the Ear, Nose and Throat; this constitutes less than 5 percent of all cases of EPTB. This involves the larynx, ear, pharynx, oral cavity, salivary glands, paranasal sinuses, nasopharynx, and the thyroid gland.

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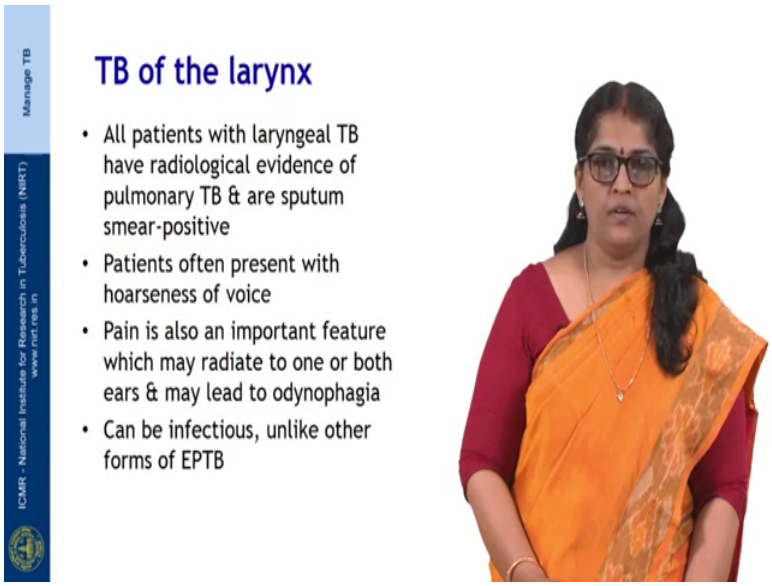

TB of the larynx, all patients with laryngeal TB have rare logical evidence of pulmonary TB and a sputum smear positive. Patients often present with hoarseness of voice, pain is also an important feature which may radiate to one or both ears and may lead to odynophagia. It can be infectious, unlike other forms of EPTB.

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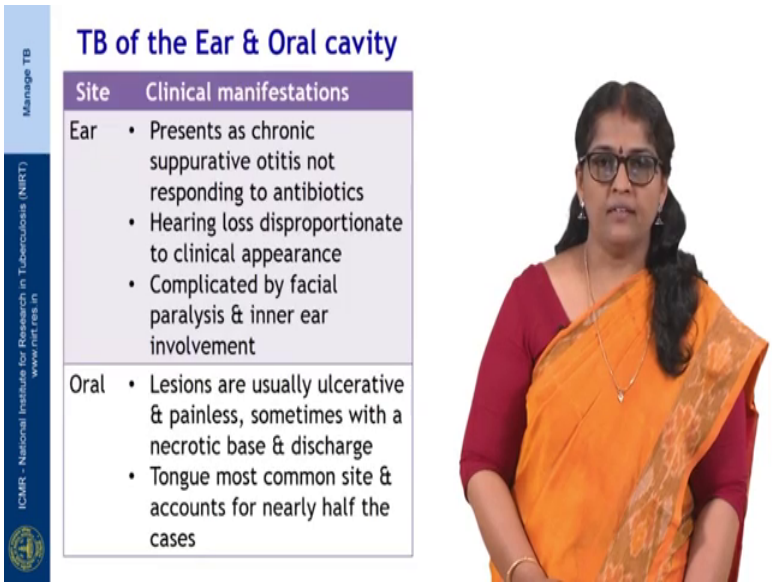

TB of the ear and oral cavity; TB of the ear presence as chronic suppurative otitis media not responding to antibiotics, hearing loss is disproportionate to clinical appearance and it may be complicated by facial paralysis is and inner your involvement.

Oral TB, the lesions are usually ulcerative and painless, sometimes with the necrotic base and discharge. Tongue is the most common site affected and it accounts for nearly half of the cases of oral TB.

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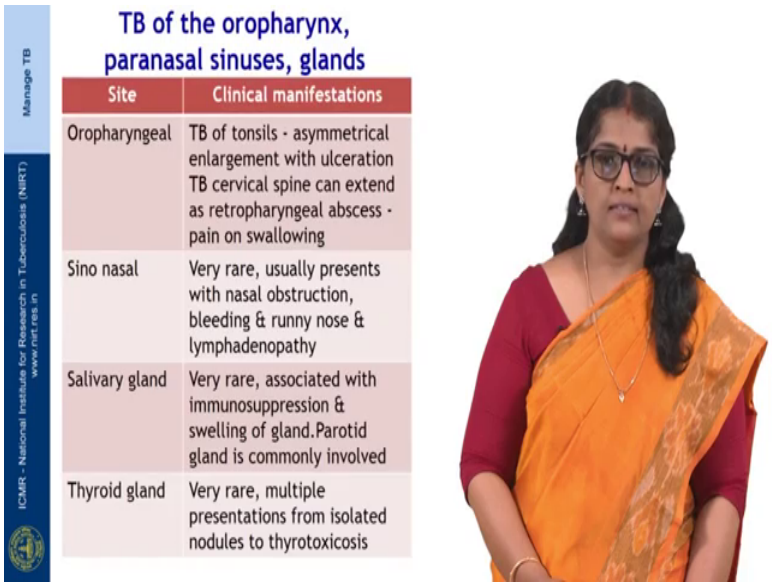

TB of the oropharynx, paranasal sinuses and the glands, TB of the tonsils, which is more common presence as asymmetrical enlargement with ulceration TB of the cervical spine can also extend as a retro pharyngeal abscess and causing pain on swallowing.

Sino nasal TB is very rare, it usually presents with nasal obstruction, bleeding and running nose and lymph adenopathy. Salivary gland TB is also very rare, associated with immunosuppression and swelling of gland. Parotid gland is the most commonly affected. Thyroid gland TB is very rare and the presentations ranged from isolated nodules to thyrotoxicosis.

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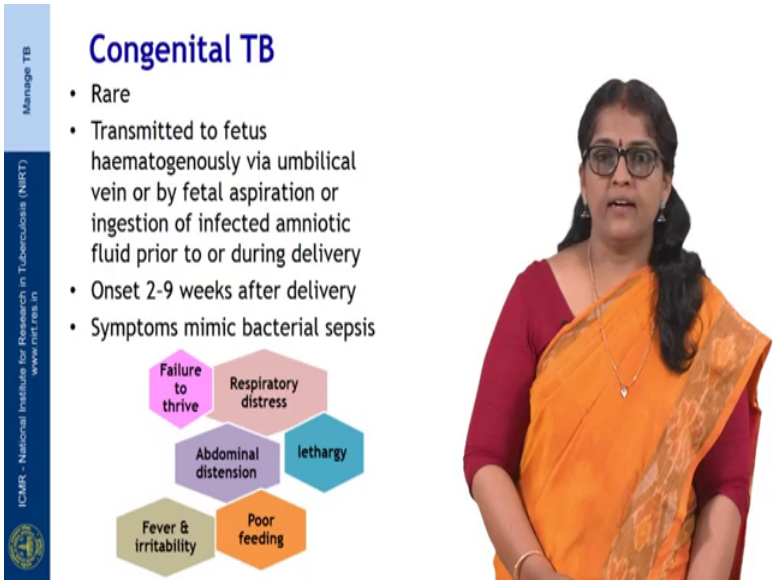

Now, coming on to the next entity that is Congenital TB; this is rare. This is transmitted to fetus hematogenously via umbilical vein or by fetal aspiration or by ingestion of infected amniotic fluid prior to or during delivery.

Onset is usually between 2 to 9 weeks after delivery and the symptoms may mimic bacterial sepsis, which include failure to thrive, abdominal distension, fever and irritability, respiratory distress, lethargy and poor feeding.

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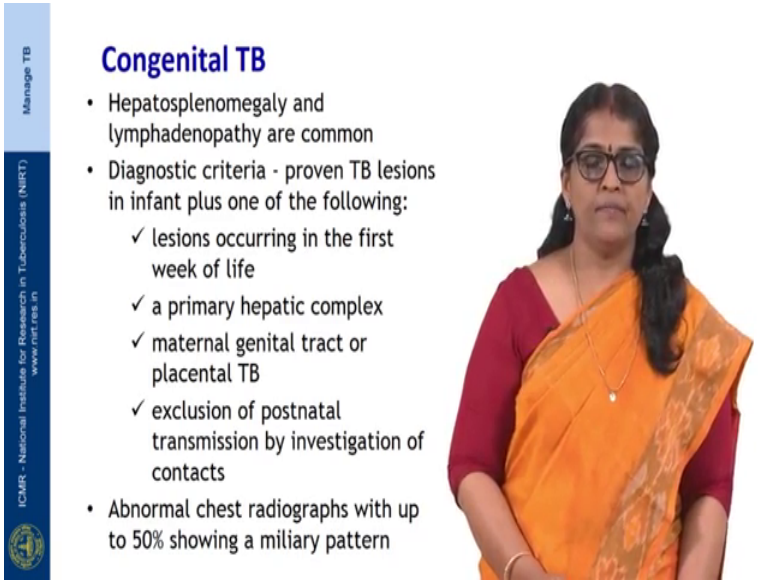

Hepatosplenomegaly and lymphadenopathy are commonly seen and the diagnostic criteria include proven TB lesions in infant plus one of the following that is lesions occurring in the first week of life.

A primary hepatic complex, maternal genital tract or placenta TB and exclusion of post natal transmission by investigation of contacts; Abnormal chest radiographs with up to 50 percent showing a miliary pattern, may also be observed.

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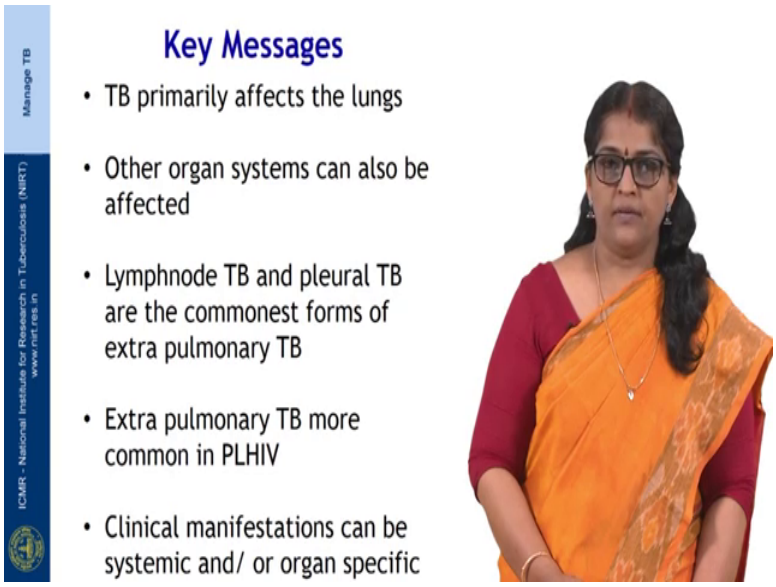

So, the key messages of this session on clinical manifestations of TB include that TB primarily affects the lungs, other organ systems can also be affected. Lymphnode TB and pleural TB are the communist forms of extra pulmonary TB. Extra pulmonary TB are more common in people living with HIV. Clinical manifestations can be systemic and, or organ specific.

Thank you.