Manage TB
National Institute for Research in Tuberculosis, Chennai

Lecture – 43
Case discussion-Approach to management of HIV-TB

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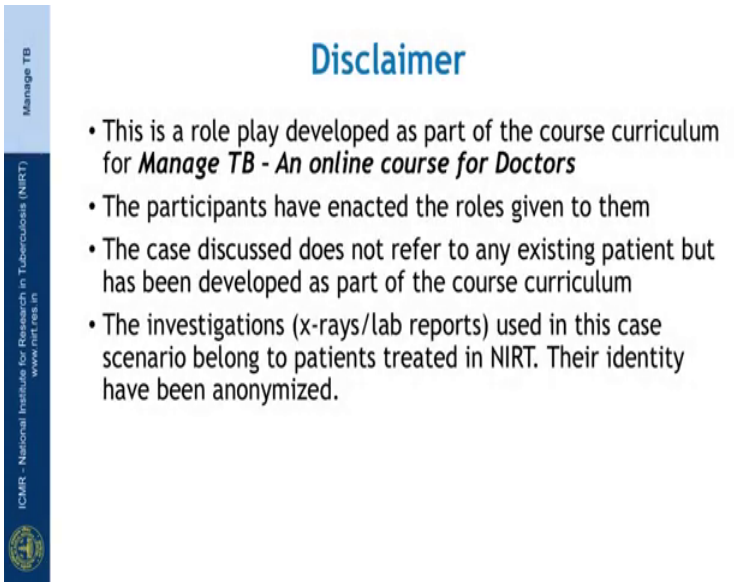

This is a role play developed as part of the course curriculum for Manage TB - An online course for Doctors. The participants have enacted the roles given to them. The case discussed does not refer to any existing patient but has been developed as part of the course curriculum.

The investigations such as x-rays and lab reports used in this case scenario belongs to patients treated at National Institute for Research in Tuberculosis, Chennai. Their identity have been anonymized.

Good morning madam.

Good morning Pratheksha.

Ma'am, I have a case to discuss. Can I start ma'am?

Yeah, yes you can go ahead, yes

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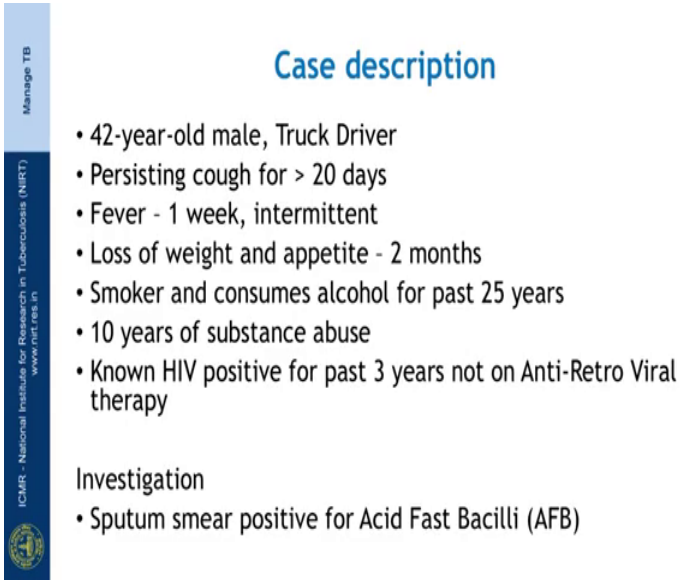

Ma'am, this is a case about a 42 year old male who is truck driver by occupation. He has come with the complaints of persistent cough for more than 20 days. He has fever for 1 week, which is intermittent in nature.

And for the past 2 months he has loss of weight and appetite. And he is a smoker and consumes alcohol for the past 25 years. He has a history of substance abuse for past 10 years. He is known HIV positive for past 3 years and not an Anti-Retro Viral therapy. Sputum smear is positive for AFB.

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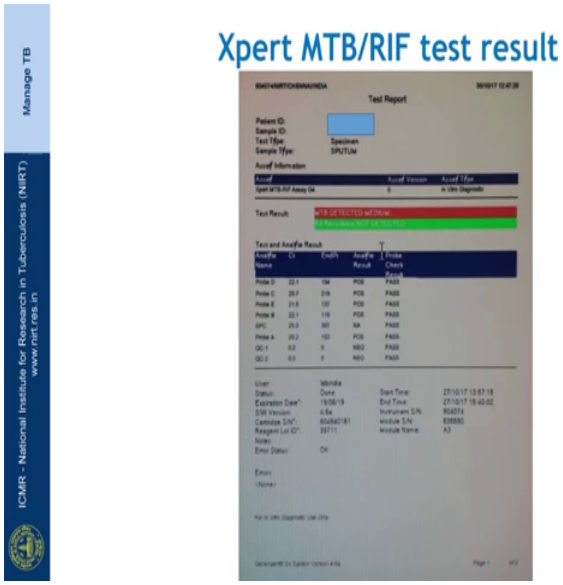

And the gene expert results have come which was NTP detected and it is rifampicin sensitive.

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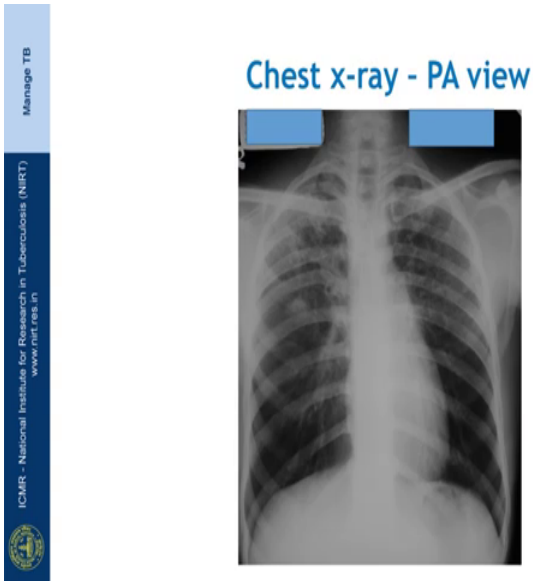

And the x-ray is also come which was bilateral parent anal in preference ma'am.

I hope you attended the lecture on management of TB in HIV infected individuals.

Yes ma'am.

So, what additional information have you collected in this patient.

Yes ma'am, I have asked him about any past history of anti-TB treatment, but he said he has not taken any anti-TB treatment. He is tested positive for HIV 3 years ago, when he had some fever. He was advised for ART, but he did not take any medicines. His CD 4 count was 200 cells per cubic millimetre at the time of diagnosis. Subsequently, he does not have any reports.

Ma'am, he has no other contaminant illness and he is not on any medications. He is a smoker for past 25 years and smokes about packet of cigarette every day, and he also takes alcohol everyday for the past 25 years. There is a history of substance abused for the past 10 years. Ma'am, I done a examination of the patient, he weighs around 42 kgs, he is not febrile or anaemic, there is no jaundice, no clubbing and no (Refer Time: 02:58) madam.

Ok, Good. So, how will you proceed with management of TB in this patient?

Ma'am, in this patient has not taken any previous anti-TB treatment plus he is sensitive to rifampicin.

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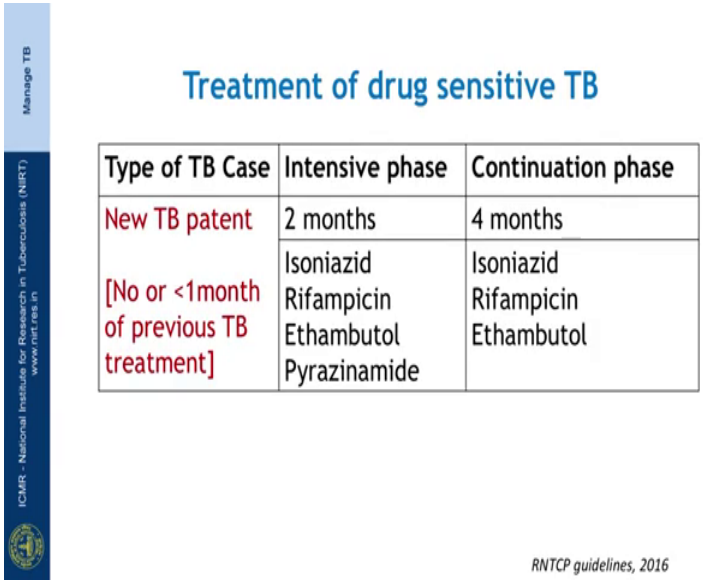

So, I would like to start in with the 6 month daily regimen of anti tuberculosis treatment. It is can consist of 2 months intensive phase and 4 months of continuation phase. In the insentive intensive phase, we will treat with isoniazid, rifampicin, pyrazinamide and ethambutol. And in the continuation phase, it will be isoniazid, rifampicin and ethambutol. And the dosage will be according to his weights bands ma'am.

Ok.

Ma'am, but I have a doubt since he is HIV positive is 6 months alone enough, the duration is enough or should we prolong the duration more?

Yeah, yes you are correct about the regimen, but actually the anti-TB treatment the regimen does not require any modification in case of HIV infected individual. So, irrespective of the HIV status the regimen is same in terms of drugs and duration.

Ok ma'am.

What is more important is initiation of anti retro viral therapy.

Ok ma’am.

So, you have to do with CD4 counts. And irrespective of the CD4 counts, you have to initiate him on ART.

ART, ma’am. Ma’am should ART and ATT being started together?

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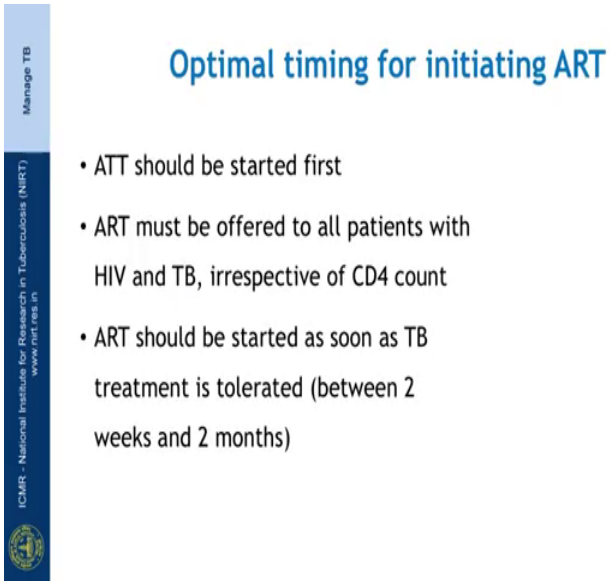

No, first you must start anti-TB treatment.

Ok.

And once he tolerates anti-TB treatment, you can initiate anti retro viral therapy.

Ok ma’am.

Between 2 weeks to 2 months.

Ok ma’am

Are you aware of the anti retro viral therapy which to be which has to be prescribed to this patient?

Yes ma’am, for this patient we will prescribe the first line ART, which consist of tenofovir, lamivudine and efavirenz. Since, the patient is under rifampicin, he would avoid nevirapine based regimens because it will cause some drug interactions ma’am.

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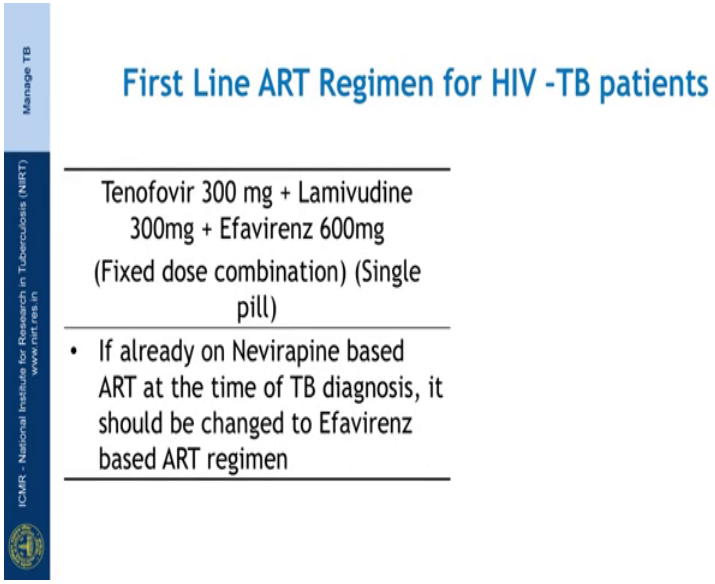

Yeah, yes, very good ok. Then what more would you like to watch for?

Ma'am I think.

After you start ART in this patient?

Yeah, I think we should look for the adverse drug reaction which is very important in this patient.

Yeah, that is more that is very important. In addition, you must be aware of IRIS that is immune reconstitution inflammatory syndrome.

Ok ma'am.

Which can be either unmasking or it can be paradoxical.

Ok ma'am.

And it can present as either development of new symptoms or worsening of existing symptoms. And this can be treated with non-steroidal anti-inflammatory drugs and in severe cases when with steroids, but it is important to continue both anti-TB treatment as well as anti-retro viral treatment.

Ma’am, I will remember the possibility of development of IRIS ma’am. Ma’am I think we have to also start amount co trimoxazole.

Yes.

Prophyliaxis, because there is a high chance of him get with the opportunistic infections.

Yeah, ok, what will you advise the patient?

Initially, I will give him a counselling because both ATT, it takes around 6 months of treatment; and ART he has to take for lifelong. So, I will give him good counselling regarding the nature of both the disease and what are the probable cause and how the mode of spread; plus I will advise him about the how importance of taking regular treatment and the consequence of not taking irregular treatment.

Yes.

And I will advise him about the side effects which are likely to happen adverse drug reactions. And also counsel him about to maintain cough hygiene and not to spit in public places. And I will also counsel the family members to get screen for TB, and tell how important it is for them.

I will talk to him about how to talk to him about that he should use a safe sexual practices, and advise him to bring his wife to get tested for HIV. And also I will tell him the treatment available for both HIV and TB is available free of cost in Women Centres. And also I will ask him to abstain from alcohol cigarette smoking and substance abuse ma’am.

Yes, very well done Pratheksha. I think you have understood the essentials of managing TB in HIV infected individuals.

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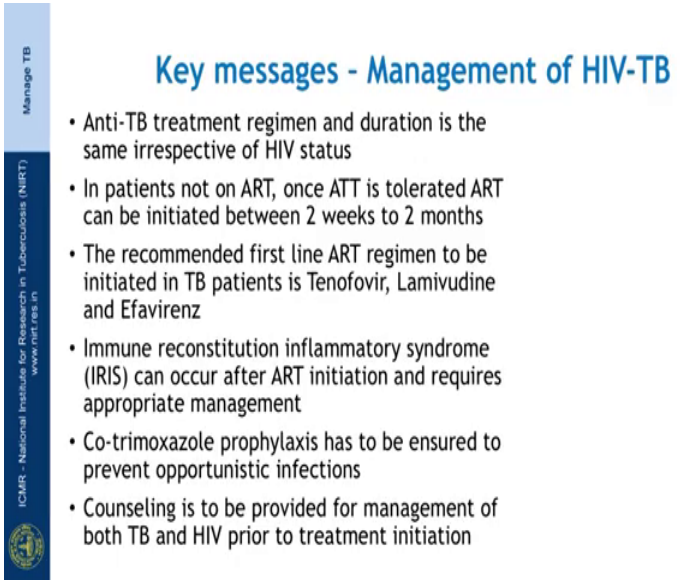

Yes ma'am.

So, can you just outline the important points now?

Sure ma'am.

Anti-TB treatment regimen and duration is the same irrespective of HIV status. In patients not on ART, once ATT is tolerated ART can be initiated between 2 weeks to 2 months.

The recommended first line ART regimen to be initiated in TB patients is Tenofovir, Lamivudine and Efavirenz. Immune reconstitution inflammatory syndrome that is IRIS can occur after initiation and requires appropriate management. Co-trimoxazole prophylaxis has to be ensured to prevent opportunistic infections. Counseling is to be provided for management of both TB and HIV prior to treatment initiation.