Psychiatry an Overview
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Module-02
Diagnostic Process in Psychiatry
Lecture-08
Investigation & Psychological Testing

So in the last talked we were discussing this confusions about diagnostic levels but as I said once we describe and we label it what do we do, do we have though we do not have a costive classification like Martin. But do we investigate are their investigations because this is a very common question every doctor is ask and every psychologists is asking even people who are into science they asked whether you can investigate schizophrenia whether you can know whether schizophrenia is there or bipolar.

But unfortunately there are no biological there are tests, there are robust findings but unfortunately they are all restricted to research. We for most of their illnesses adding a couple of other illnesses usually talk about in that the last series of lecture we are just like sleep disorders and other thing where we can definitely find a indicator but the biomedical or electrophysiological or imaging findings which we do for psychiatry illnesses they have a lot of overlap with other condition.

And so if you ask me where there are in doctors ask they have there is a single test which can prove that this is schizophrenia. Unfortunately no, maybe, maybe as I said in the last lecture also another 20 years within the whole shape were we are really able to tell the causative links and other biochemical links and biochemical markers of the hunt is on but till that time but that is as far as primary psychiatric illnesses are concerned.
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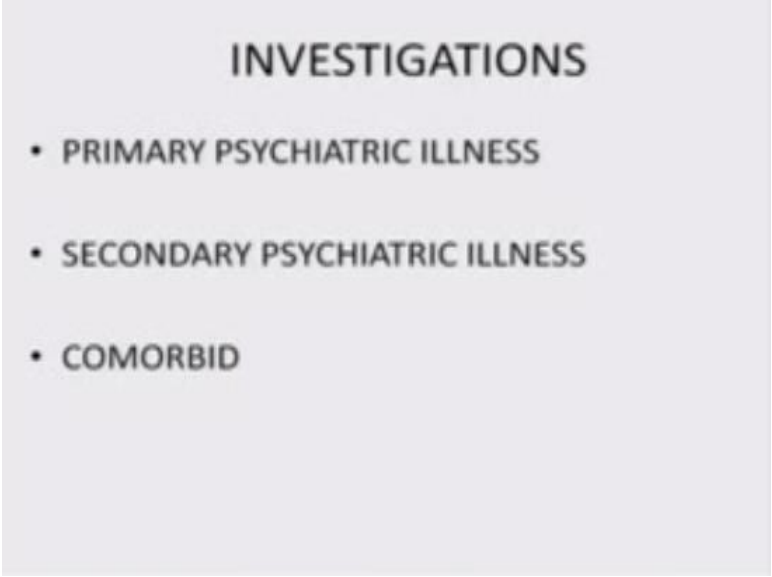

The primary psychiatry illnesses where these are illness which has a certain description, which is experiential state of mind of the person and does not have any other costive thing. But there are secondary psychiatric illnesses also.

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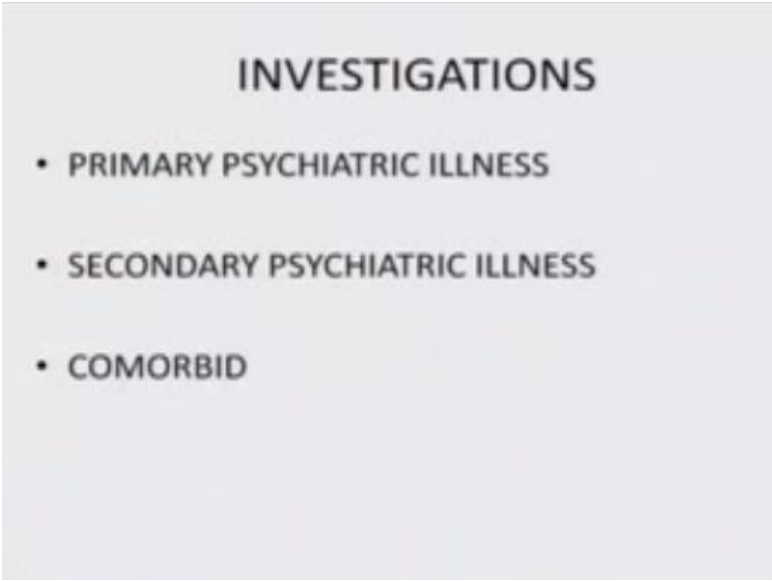

The same descriptive send normal thing can appear caused by some other illness and third situation is where two illnesses of psychotic illness and medically less are coexisting.

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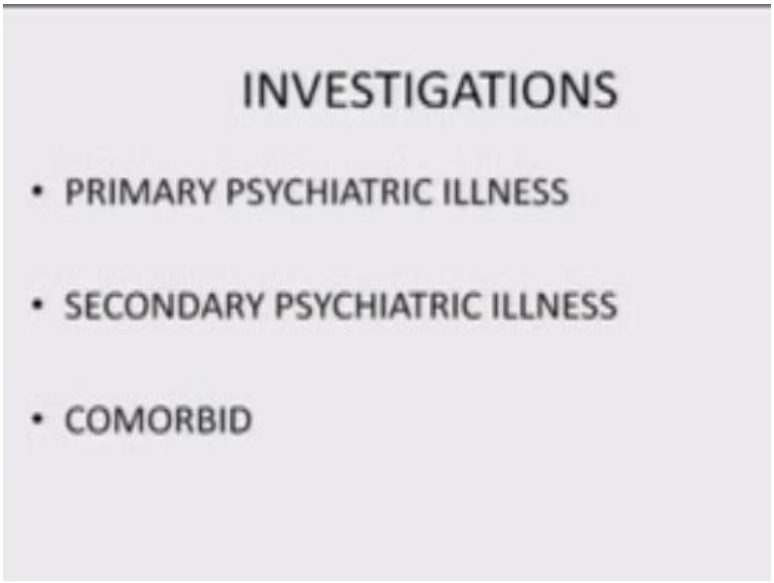

Let me give an example, a person has a stroke in a area of brain which causes psychosis. The person has never had a psychosis before, now this we can and we find on MRI in fact same basal ganglia. In fact is the area where the blood flow is stopped in the, those tissues the nervous tissue gets damaged and the person lands in psychosis. We are able to make a causal link at least for the functional purposes it just a description of the network.

A person so this is like secondary psychotic illness a person may be having diabetes and a depression although it said that 30, 40% diabetics have depression. But again as I said this may be just a coma bed condition. We are still do not have a causative link they may be a linked with cortisol and all or as a by chance a person who is having depression develops a fungal infection.

They may not be related although it is said that when you are depressed into the field of psychoneuro immunology that you are fighting power your whole immune system goes they did not. But that is still not proven so primary psychiatric illness, secondary psychiatric illness in coma opportunity.

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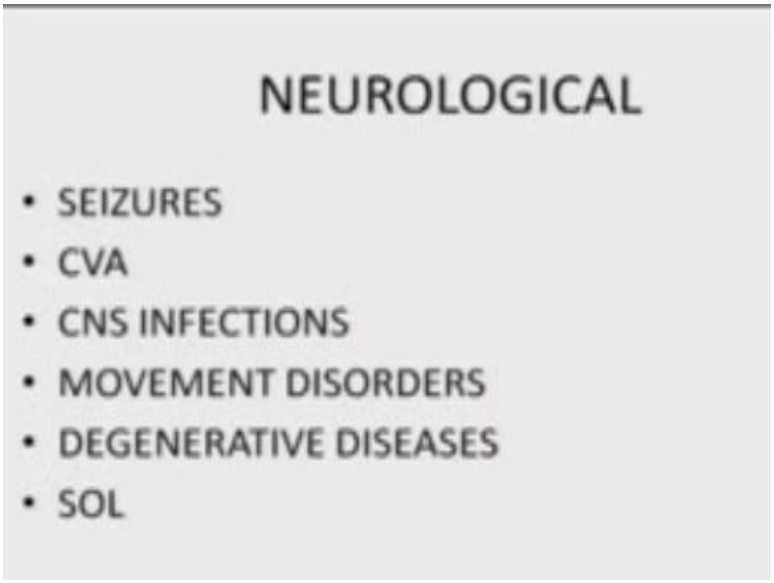

So let's stick neurology, neurology is a branch which actually if you ask me it's a hardware and software business between psychiatry. You know they lot of overlap is the whole interface of neurology in psychiatry. Some of the common condition Caesars epilepsy now if you did something called accomplished partial see there are temporal lobe epilepsy which manifested repetitive behavior with altered sensorium.

It can overlap lot of psychosis cerebral vascular accident I just give an example, sometimes the beginning of meningitis or encephalitis infections is exhibited by altered behavior by a memory loss sudden memory loss people not able to concentrate Frank depression, Frank psychosis, movement disorders not times and people on drugs it difficult to decide whether they are not something below the drugs or because of the degenerative diseases dementia.

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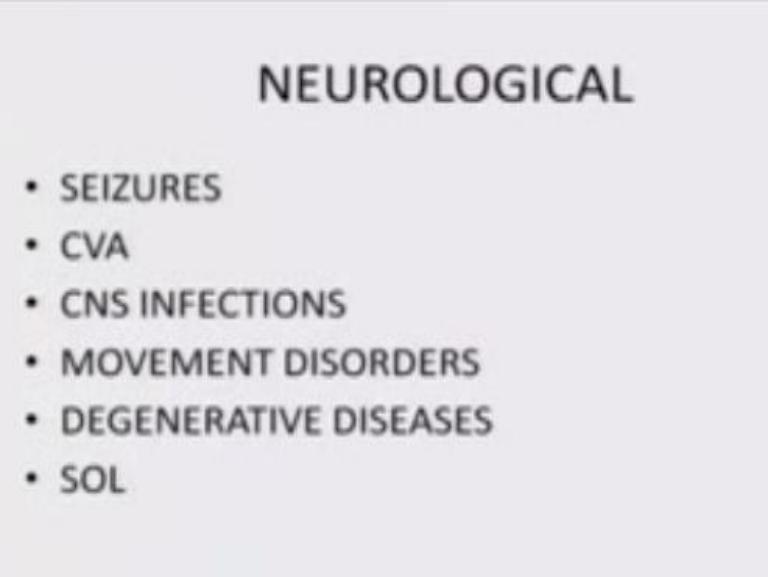

Space-occupying lesions, tumors sometimes and we have seen such patients that whether people have presented with psychosis and depression at old age and when we went on the investigated we found a tumor. So these are the cases where investigation is a must. As it is for the first time psychosis, first time depression in a teen age or a old person is a one should diagnose it to rule out any cause.

These days with technologies has become cheaper all psychiatry patients should be investigated it's a flaxy not to do it but because you never know you don't know that 10% we have something will come out. So EG in Caesars will roll out whether it's a psychosis or temporal lobe epilepsy. CSF examination lumbar puncture several spiral food the variation in protein, glucose and cells will tell you any indication of a CNS infection.

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CT, MRI as they says that is a costly investigation they often tell as any structural problem especially with things like neurosistes are courses. Where this small dying or alive cysts have cysts on in the multiple cysts in the brain can mimic accomplished partial Caesars but can mimic psychiatry illness also. Because after all if you look at it the behavior is coming from the same brain.

Whether that the symptoms have caused by apparent firing in the circuit on its own because the disturbance of electrochemical this function or because of something external by assist there or a tumor there or by lack of blood flow there which suddenly they engines the switch so it's like a grid. Now the whole grid may go on the different firing or a part of that grid may be firing differently creating psychiatry illness.

Which happens spontaneously we don't know why? Which is a primary psychiatry illness in the places where we know that there is some problem with the switch or some circuit has gone wrong then there is secondary psychiatry illness which we can see on MRI, CT scan or CSF. A small thing like hyponatremia, hyponatremia is the sodium and potassium and calcium and chloride are in a certain range in body.

So in old people especially in people who are a lot of physician see them there and antihypertensive they are not eating salt with a myth that you should not eat too much salt then that then come summer and then you lose a lot of sweat, lot of salt in the sweat you are not eating salt suddenly sodium goes beyond a certain level. And there is no definite threshold it varies from person to person the first time the 65-year old man lands up in a almost manic state very aggressive, angry hallucinating it has never happened before.

So we can think it is a primary psychiatry illness but we should think first that it is a medical illness and you get your sodium as said you find its 120. So obviously, what do you, you have to treat the psychosis no doubt. But unless you correct that sodium psychosis is not go off in diabetes as I said 30 to 50% people now we are finding the faces of diabetes where depression varies.

So it in the initial phase it happens then it goes off then it comes back thyroids and hyper thyroids is one of the commonest cause of depression and normally it is not got till the person is starts having physical symptoms of thyroids. But it is a must because it is such a hidden disturbance in depression and anxiety where the hyper thyroid at times can cause a lot of psychiatry I mean deficiency.

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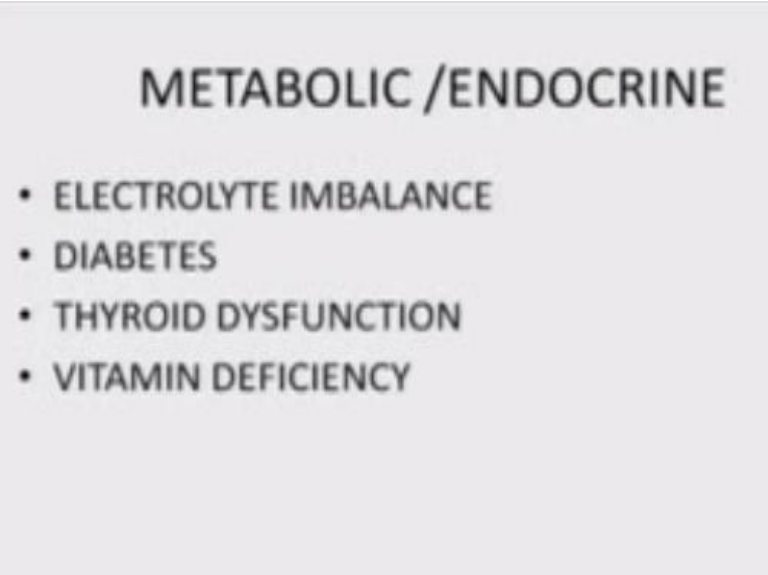

One of the causes of reversible causes of dementia and illness like dementia there is a progressive decline only 5, 10% people have some causes reversible causes like have subdural hematoma where but there may be are certainly a fall in the whole person and maybe the whole leakage of brain in the subdural area which will be causing pressure on the brain it can be just be relieved by a small surgery.

So somebody falls, somebody has dementia like symptoms which are of acute onset. It is not progressing it has happened two, three months back but the worst thing is too much and person not able to walk you have to find out short the neurosurgeon and so they are something called normal pressure hydrocephalus. Where there is a disturbance in walking disturbance in memory vitamin B12 deficiency is one of the very common deficiency and it can lead to symptoms of dementia.

So a physician who is seeing behavior problems should suspect some issue and a psychiatrist who is seeing we were promise should not love everything as a primary psychiatry illness should consider cause at least said that two extremes of Ages children and adult and old people. B12, B6.

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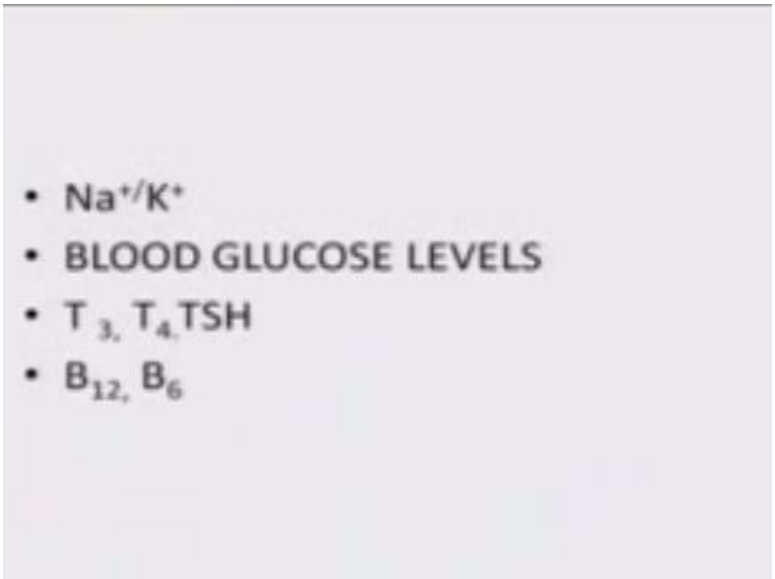

Lot of b6 deficiency especially in people who use alcohol and other things have a lot of neuropathic problems.

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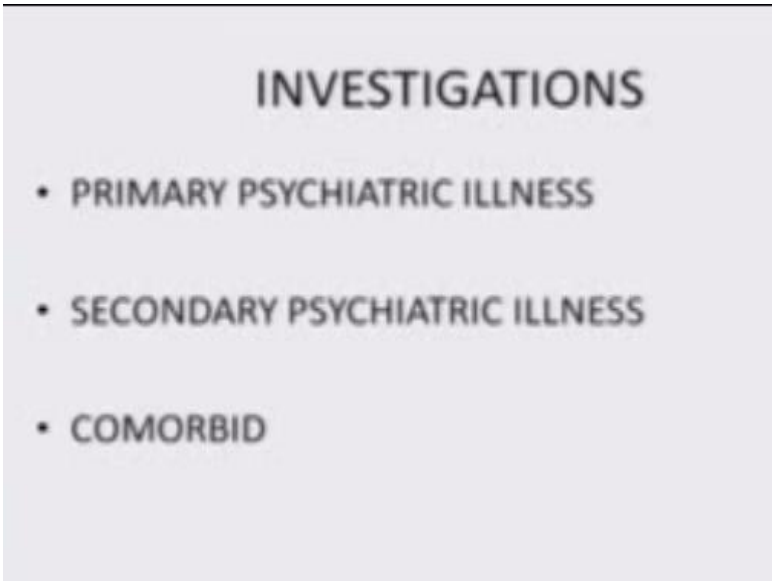

So the whole purpose is that not everybody was coming to you with behavior problems has a psychotic diagnosis one has to be patience to look into the context as I said previously the cause it may be a simple cause like let me give an example, some of the kids who suddenly have a drop in academic performance in class three and four. When they come to us the parents are worried teachers are worried they are getting her abuser at them and all that drama which goes on.

Some of them have just poor eyesight myopia is developing and a small thing we will do it. But one has to be careful about it so unless that's why it is important to know medical history unless you ruled the contacts, unless you route out the environmental starch which are disrupting the behavior and mentally have ruled out or through investigation any existing, coexisting medical unless you are a lot of overlap happens one should not label

because psychiatry labels are more or less for lifetime there very few episodes illnesses which go off.

But the trend is that when you to start eating them with drugs people get dependent on drugs and then so roll out the medical illness because they are highly treatable. As per now someday we will know that cause then we will treat it much better because Psychiatry medicine have to be continued for a longer period before committing for that especially with old people and then you have to take care of side effects and all the other things.

So it's better to look at this interface of psychiatry with the other illnesses especially for doctors who are practicing and probably that would answer the question to non-doctors also. That there are primary psychiatric illnesses some of them have causes which the doctor should rule out and treated so medicines still remain the main stay of all the treatment. And look at the coma bed condition because they can complicate like diabetes and hyper thyroid.

So that's it as far as the investigation goes there is a set there is a this is as far as medical investigation school there is a set of different investigations which I will tell you briefly about and they are the psychological investigations. Now as far as psychological investigations are concerned they have evolved from as I told you from the from right from psychoanalysis to behavior to so psychological assessment are almost like assistance and I joined to the minister of clinical examination to the medical investigation.

So them of the common investigations like one some of them are called projective test. They are very useful in with children the projective tests use the premise of defense mechanisms. And they are suppose to provide a stimulus in an open-ended fashion to which the person responds and then analysis of that tells you the under lying unconscious mechanisms like one of them is a Rorschach inkblot test.

There are 10 cards which the ink has been put in a certain pattern the person is given the person responses recorded and then on second inquiry the reasons for those response which judges the emotional level the movement and the major characters similarly and have a proper scientific analysis of it is that has been involved which gives you interpretation whether it is on the what is happening at the unconscious level.

Whether it's in a psychotic dimension or mood dimension which gives you a failure or a support to your clinical diagnosis like traumatic Apperception tests where are cards are shown the person is asked to write a story it's a unstructured thing and that stories analyzed on the basis of protagonist and the feeling towards the protagonist. Similarly, a childhood version of his culture a childhood a perception test is useful.

The other things which are there to like MMPI or 16PF which are used to assess the personality factors. Now personality is not a unitary construct they have various dimensions to personality and these question is and the various just bring out the those factors. Intelligence tests like a stanford-binet wrestlers and Indian version like party intelligence battery they are also be device to check intelligent they are very useful for children actually.

We are certification IQ is required or to understand the delaying growth which focus both on the verbal as well as the, the performance both questions. So intelligence as I said it's not a unitary thing it is to multiple dimensions of verbal and performance and emotional intelligence and so these questionnaires and this performance test they all measure and probably they reports helps us in clinical diagnosis.

The other thing which is being used in research for quantifying all this behavior are called rating scales. Some of them are like Hamilton depression rating scale, Hamilton exaggerating scale brief psychiatry rating scales positive and negative symptom a scale.
These scales are used in psychiatry research primarily to quantify the degree of disturbance to quantify the some of them are self-administered some of them are administered by a trained person.

So the same behavior of delusions hallucinations or exhausting your depression is quantified with the score this helps in one quantifying the baseline level looking at the prognosis, looking at the treatment that responds to treatment and predicting. But these are largely one does not use in clinical sense and they are largely restricted to reset. So overall put together, if you ask me the whole thing of this introduction to the clinical aspect will follow about the illnesses in next two weeks.

The most important thing is once we have understanding of the brain and we know the processes part of it is they apply to the to the clinical practice which is observing the person looking at the context of the person, looking at the way person things. The external factors right from trauma to drugs looking at that causes of disturbance what disturbs the person is having that helps us in knowing the mental state of the person.

Which will help us eventually in the matching the treatment with it investigating if there is any other cause apart from the treatment and that and or with all the epidemiological studies in the worldwide studies which we have done. We will be able to look at the prognosis depending on all these factors. So that is it for now and from next week we look at specific illnesses and try to explore the treatment and causes. Thank you.