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**Week-07**  
**Lecture 03: How to Prescribe ENDS?**

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**How to prescribe ENDS?**



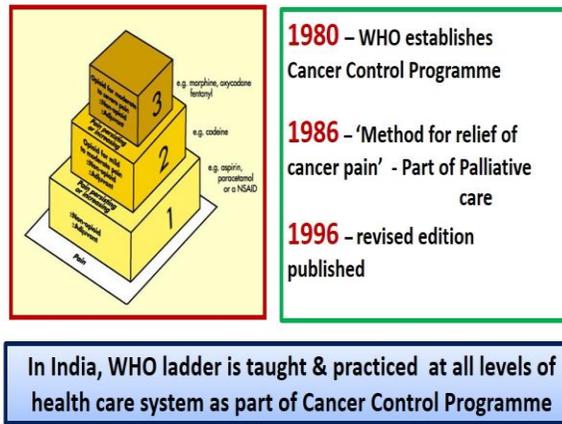
Pain & Palliative Care Services  
Gujarat Cancer & Research Institute  
Ahmedabad

Namaste, this lecture is for week number 7 and lecture number 3. Today I am going to speak about how to prescribe END's. This END terminology may be new for you, it is a short form of essential narcotic drugs. As you know in palliative care, our patient has moderate to severe pain and this can be relieved only by use of narcotic drugs and there are 6 drugs which are essential defined as a essential narcotic drugs under NDPS act 2015. So we are going to talk about how to prescribe these drugs.

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## HISTORY

### WHO Ladder == Cancer Pain



A great quick revision to the history of WHO ladder and how we practice put the practice WHO ladder in practice for prescription of essential narcotic drugs that we will go through quickly.

The WHO ladder was WHO established it in 1980 as a part of cancer control program and in 1986 it was taken up as a method for relief of cancer pain. This was specially designed for treatment of cancer pain and a part of palliative care and in 1996 revised edition was published. In India WHO ladder is taught and practice at all levels of healthcare system as part of cancer control program.

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### Concept of WHO Ladder ...

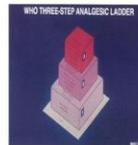
- Based on pain intensity; not on Rx strategy
- Oral analgesics
- Promoting better use of existing drugs
- To Rx patients from poor settings
- Put oral opioids on the map
- No arbitrary upper limit



By the mouth



By the clock



By the ladder



Individualised to patients



Attention to detail

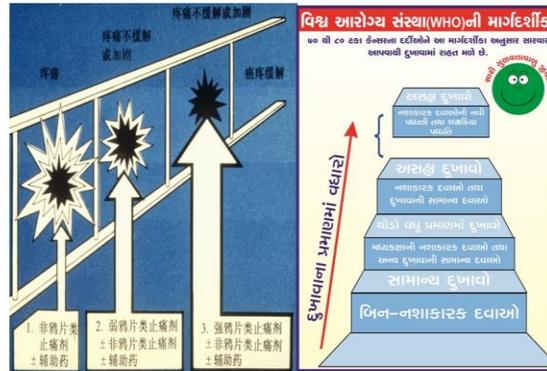
So the basic concept of WHO ladder are 5 principle, it is based on 5 principle.

All the drugs in WHO ladder are given by mouth, they are always given round the clock and not on as per requirement. It is given like 6 hourly, 8 hourly round the clock dosage is given. All the drugs are given as per the WHO ladder. In ladder 1 the drugs are non-steroidal anti-inflammatory and adjuvants in drug level 2, ladder 2 they are mild opioid and in ladder 3 they are opioids. Then fourth principle is attention to detail.

You must look for the side effects or any complication because of the drug. For each and every patient you evaluate all the problems that might have occurred because of the prescription of these drugs. And fifth is individualized treatment. Few of your patient may be sensitive to END's or they may be sensitive to NSAIDs. So as per the patient's body and patient's reaction you can decide the type of drug you want to prescribe to that particular patient.

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## WHO Ladder Translated in Chinese & Gujarati



The "four-step analgesic ladder" therapy seems to be more suitable for cancer pain relief in China.

WHO ladder is widely used across the world and it is it has also been translated in the local languages. Like the on left side you will see it is translated in China and in my setup we had translated it in Gujarati our local language.

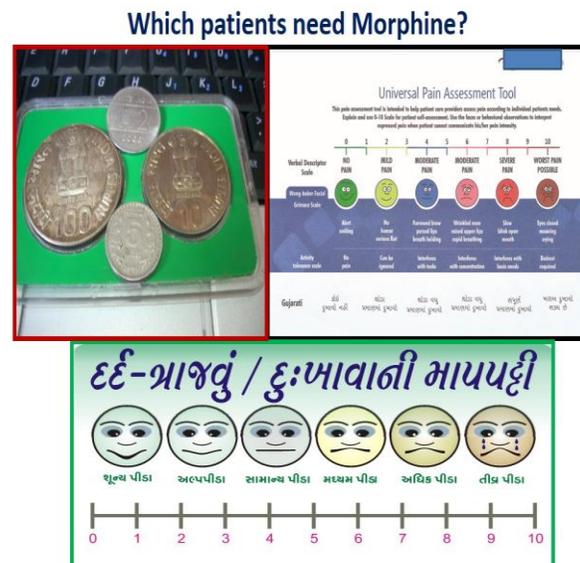
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Over the period the under gone many changes with introduction of the patches trans therapeutic system therapeutic system and introduction of intervention blocks the WHO ladder is or incorporated all new technology also. So it is not nowadays it is not so that all

the patient should be given particular drugs which are mentioned on the ladder, but on the way along the ladder if a patient is fit for neurolytic block you may give neurolytic block if a patient is not able to swallow medicine you can prescribe patch and of course psychosocial support to your patient is always be done at all steps of ladder. So the with by incorporating the this new technology new drugs and psychosocial intervention you can definitely improve quality of life of your patient and that is the aim in any palliative care setup.

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Firstly whenever you want to prescribe in END or morphine out the 6 drugs which are essential narcotic drugs are codeine, morphine, methadone these are the 3 available and fentanyl these are the 4 available in our Indian market and others are oxycodone and hydrocodone which are not available here. So whenever you are prescribing morphine or similar drug first of all you have to assess the patient. What is the vast score of the patient? What is the severity of pain of the patient? So any patient having moderate to severe pain means vast score from 4 onward 4 to 6 or 7 to 8, 10 they need END's.

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# Opioid Clinics

- Special Setting
- Attitude of Team
- Time
- Psychologist
- Follow Up



**“Goal Setting” by physician & patient-  
How much function can be improved ?”**

And once you started prescribing essential narcotic drug from your clinic your clinics are not only pain clinic but they are called opioid clinic because now your focus has changed only not only for from pain management but a special setting and special training is required to your team to handle the opioids. So you in your team you should have a psychologist also a social worker also and enough time is given to patient for evaluation and taking up the history and keeping the records, keeping the documentation. So goal setting by physician and patient that how much function can be improved that is the first goal which is set whenever patient enters your pain clinic.

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# Evaluation of the Patient

- The nature & intensity of the pain.
- Current & past medications, its side effects & effectiveness.
- Underlying co-existing diseases. E.g. **depression, hypothyroidism.**
- How chronic pain has affected the physical & psychological function of patient.
- **History of past & current substance abuse.**
- Is patient on opioids from another provider?  
One can check with previous physician for details.
- Personal or family history of abuse including alcoholism, illegal drug use and prescription drug abuse.
- Urine drug testing should be done initially & can be used to measure adherence.

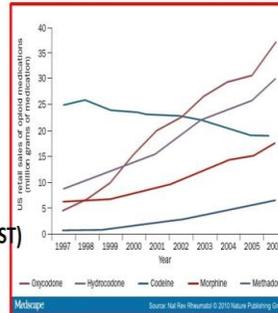
Firstly when you decided to prescribe a END to a patient you start with the evaluation of the patient. First and foremost intensity of the pain, second is which medication patient presently is taking and what are the side effect whether this medicine is effective or not. Whether patient has history of depression or hypothyroidism then you should keep this in mind that these patients are likely to take extra dose of END's or might develop dependency on the on your the drug. How chronic pain has affected the his lifestyle? Is there any disability? History of past and current substance abuse that is very important. Is patient is taking opioid prescription from any other provider like he is attending some other physician also and taking morphine.

Personal or family history of drug abuse in the in patient like alcoholism or any other drug abuse history is given by the patient and patient should be ready for any testing which is required whenever you are suspecting that patient had has abused the drug you he should be ready to undergo a urine test to decide the quantity of drug which is excreted in the urine.

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## Tools to help assess Potential “Substance Abuse Risk”

- CAGE – AID Questionnaire
- Opioid Risk Tool (ORT)
- Dire Score
  - D – Diagnosis ,
  - I – Intractability of Pain,
  - R – Risk factors,
  - E – Efficacy
- Drug Abuse Screening Test (DAST)
- Screener & opioid Assessment for Patients with Pain (SOAPP)



**No questionnaire should take more than 1 min  
Of yours and patients' time!**

Before giving essential narcotic drug one can use there are many tools to available to assess the potential substance abuse risk. The commonly used tools are cage questionnaire, opioid risk tools and dire score. So, you can study one of the tools and make it whatever you are familiar with and keep it in your clinic you can use that particular tool for all question paper a questionnaire and no questionnaire should be very lengthy otherwise patient will get bored and he will not be able to give a proper or correct answer.

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### When is it wrong to use Morphine?

- ✗ Without assessment of pain
- ✗ Intermittent pain (Bone pain, Nerve pain, Colic)
- ✗ Pain not related to Cancer  
(Heart burn, peptic ulcer & anal fissures)
- ✗ Distension pains  
(Gastric distension, tenesmus)
- ✗ Incidental pain  
(Headaches, abscesses)



There are certain contraindications relative to morphine use it will not be used for certain types of pain treating the certain types of pain.

First informers without assessment of pain you do not prescribe morphine only the morphine is given to the patient who are having moderate to severe pain for mild pain there are other drugs available. Patient having bone pain, nerve pain and colic pain they do not respond to ENDS or morphine. Pain which is not related to cancer like heartburn, peptic ulcer and anal fissures will not respond to morphine. Pain because of the gaseous distension gastric distension, tenesmus will not respond to morphine and incidental pain because headache and abscesses pain which is because of infection will not respond to morphine.

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### How to start Morphine?

- ✓ Dose of 5mg to 10mg every 4 hours
- ✓ Never prescribe PRN
- ✓ A laxative
- ✓ An anti-emetic
- ✓ Titrate the dose till the pain is relieved

### What is the correct dose?

**The correct dose of morphine is the dose that relieves the pain without causing drowsiness.**

So, when a patient comes to you for the first time he was having moderate to severe pain suppose his pain score was is equivalent to 8 you have decided to give tablet morphine.

Start with 5 milligram or 10 milligram morphine every 4 hourly. Morphine the immediate release tablet is short acting the half life is about 120 minutes and it is to be given orally. The tablets are available in 10 milligram, 20 milligram, 30 milligram. You can start with

5 milligram that is half tablet morphine 4 hourly. Never prescribe PRN means as per requirement it is not done it is always 4 hourly.

Add a laxative this is very very important. They say the pain which prescribes morphine should prescribe laxative as well and the laxative commonly we prescribe for morphine is tablet bisacodyl. Bisacodyl 5 milligram, 2 tablets at night time. In few you might have to add anti-emetics sometimes initially patient will get nausea vomiting with morphine. So add anti-emetic like Emeset or perinorm and tell patient to take for 2 to 3 days.

Titrate the dose, titrate the dose means increase the dose if required if pain is not relieved with 5 milligram you can after half a day or one day you can increase up to 10 milligram. So titrate the dose till the pain is relieved. So keep on increasing 5 milligram every time till the pain is relieved. So what is the correct dose of morphine? The morphine is not dose is not calculated as milligram per kg. It is always it is the dose which reduces the pain of the patient.

So the correct dose of morphine is the dose that relieves the pain without causing drowsiness. So in one patient it may be 5 milligram 4 overly another patient it may be 15 milligram 4 overly depending on his pain.

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### What if the patient gets drowsy?

In any patient on morphine the rule is this: if pain-free and drowsy, reduce the dose. Be sure to exclude other causes of drowsiness (hypercalcemia, for example)

### Is there a maximum safe dose of morphine?

**"No"**

- ✓ Increase the dose in steps until the pain is relieved
- ✓ Use the increments of 5mg, 10mg, 20mg, 30mg, 45mg, 60mg, etc
- ✓ Increase the dose every four hours, if there is still pain
- ✓ 90% of patients will have relief within that 5mg to 60mg range
- ✓ Occasionally, the dose may need to be 500mg or higher

What if patient gets drowsy? Initially if patient had long standing pain for so many days he had pain and he came to doctor only after 15-20 days. So 15-20 days he has not slept he has lots of pain and now if you give morphine he will immediately go to sleep. So initially for 2 days patient may sleep little bit more.

So tell the relative not to worry, but he is rousable. Relative can arouse him and make him sit make him eat and again he goes to sleep. So he is catching up from the loss sleep he had in first few weeks, but if this drowsiness prolongs after 48 hours or 72 hours then your dose is little bit higher which is causing too much of sleepiness in your patient. In this case you reduce the dose bit suppose he is too much sleepy with 10 milligram reduce it to 5 milligram. So is there any there are maximum safe dose of morphine? No.

Safe dose is that dose which relieves the pain of the patient without causing drowsiness this is the gold standard statement. So increase the dose in steps until the pain is relieved use the incremental 5 milligram then increase to 10 milligram, 20 milligram, 30 milligram like that. Increase the dose every 4 hour if there is still pain as long as pain is there you keep on increasing every 4 hours. 90 percent patient will have relief between 5 to 60 milligram range. Most of our patient have pain relief within 5 to 60 milligram.

Sometimes total dose of morphine requirement is maybe as high as 500 milligram per day. In many of our patient we have prescribed morphine 400, 500 milligram in 24 hours.

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## How to start Sustained Released Morphine?

Once the patients' pain is controlled on a regular 4-hourly dose, then change to the equivalent dose of Morphine SR given every 12 hours.

4-hourly dose of oral morphine	12-hourly dose of Morphine SR
5 mg	15 mg
10 mg	30 mg
20 mg	60 mg
30 mg	90 mg
45 mg	120 mg
60 mg	180 mg
90 mg	270 mg

4-hourly dose of morphine x 3 = 12-hourly dose of Morphine SR

Morphine tablet is available in 2 formulation. One is immediate release which is short acting another is controlled release or sustained release which is long acting. So the sustained release or controlled release has action for 12 hours.

So in this case this tablet should be given 12 hourly only morning and evening. So firstly we start the patient with immediate release tablet. This is immediate release tablet these are short acting. So we will come to know what is his morphine requirement. So after 1 or 2 weeks when his pain is stable his dose requirement is properly calculated he is stable with a particular dose then convert it into the long acting formulation.

So he has to take swallow tablet only twice a day. So how to convert that? So if the daily requirement is 5 milligram 4 hourly the long acting version will have 15 milligram tablet twice a day 12 hourly. If patient is on 10 milligram it should be 30 milligram. So the equation is 4 hourly dose multiplied by 3 is equal to 12 hourly dose. So suppose patient is on 10 milligram multiplied by 3 is equal to 30 milligram sustained release tablet 12 hourly, right.

So this is the table for of converger or you can just remember this formulation.

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## Oral morphine to Transdermal Fentanyl

Morphine 45 mg daily  $\equiv$  Fentanyl '12' patch  
Morphine 90 mg daily  $\equiv$  Fentanyl '25' patch  
Morphine 180 mg daily  $\equiv$  Fentanyl '50' patch  
Morphine 270 mg daily  $\equiv$  Fentanyl '75' patch  
Morphine 360 mg daily  $\equiv$  Fentanyl '100' patch

✓ If effective analgesia lasts less than 3 days, increase the patch strength rather than frequency of change of patch.

✓ Dose adjustment should not occur more rapidly than 72-hour intervals in steps of 12-25 micrograms/hour.

Sometimes this happens mostly in our head and neck cancer patients. Usually when the disease is not much advanced he is able to swallow orally there may be he is with a ryles tube in nasogastric tube and medicine is given through it. But due to some reason tube comes out and disease is advanced. Now you cannot put the ryles tube again or patient is not able to swallow.

In that case you might have to switch over to another END essential narcotic drug that is fentanyl patch. Now your morphine a patient is stable on 60 milligram morphine, but now his ryles tube is out he is not able to swallow you have to put it on patch. So how to convert from morphine to patch? So these are the formulation for that. Suppose patient is on 45 milligram morphine every day the patch requirement is 12 microgram fentanyl patch comes in terms of microgram released per 24 hours. So if morphine requirement is 90 the patch strength is 25 microgram per 24 hours.

So this way you can convert to the patch and apply the patch. The fentanyl patch action starts after 12 hours. So the day you apply patch you have to continue oral morphine whatever he can take like in you can put it sublingual or what for up to 12 hours and then the patch action will take over. In dose adjustment should not occur more rapidly than in fentanyl patch we cannot once the patch is applied the action last for 72 hours. So you cannot do any changes in the dose up to 72 hours and thus minimal strength of patch available is 12 12.5 microgram and 25 microgram. So if 25 microgram patch is applied

you want to raise up to the dose you can apply another patch of 12.5 or another patch of 25 microgram like that. Suppose a patient comes to you for the first time and he is having severe pain he has not taken morphine or fentanyl or any other ENDS anytime. Can you start all of a sudden morphine for the first time? Usually we go as per WHO ladder first we put the patient on END side then on second step we put the patient on tramadol that is synthetic opioids that is mild type of opioid then put him on morphine.

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### How to treat excruciating pain with Morphine?

Bhikhubhai, M/63 yrs, is a known case of Ca Lung, presents with Severe continuous pain in lateral chest and back. His wife gives H/o various analgesics, in large doses except Morphine.

**Rx**

-- Inj Morphine 5 to 10 mg IM, every 20 mins, till pain is relieved  
Then change over to double dose of oral Morphine 4 hrly

Or -- Give IV NSaIDs, anti-emetics, fluids etc. Start Tab Morphine 20 mg, titrate every 4 hrly, till Pain is relieved

Or -- Stabilize the patient, arrange for Epidural Analgesia

But patient has come to you with severe pain and immediately you have to start jump to the ladder 3 is it possible? Yes the answer is yes because the aim is to relieve his pain that is the first priority.

In this patient here I have described a small case report also Bhikhubhai a male 63 years is a known case of cancer of lung and presents with severe continuous pain in lateral chest and back. His wife gives history of giving various analgesics like diclofenac whatever is available around the across the counter in large doses except morphine he has not received morphine at all. How you will treat? Suppose if there is no venous excess then you can start injection morphine which is available in many of the setup 5 to 10 milligram intramuscular every 20 minutes till the pain is relieved and then change over to double dose of morphine orally. Suppose he receives 10 milligram now pain is not

relieved after 20 milligram another 10 milligram 20 minutes another 10 milligram pain is relieved. So, his total dose requirement is 20 milligram, but when you switch over to oral you have to double this dose.

So, you have to give 40 milligram morphine 40 milligram morphine orally, right 4 hourly. Similarly you can give IV morphine also you take 1 ampoule of morphine dilute into 10 cc. So, 10 milligram morphine diluted in 10 cc and inject 1 cc at a time every 5 minutes till the pain is relieved and then you switch over to the oral morphine. Along with that morphine action enhanced by giving non non-steroidal anti-inflammatory also. So, you can give injection diclofenac, injection paracetamol and anti-emetic suppose since you are giving such a large dose of morphine for the first time patient may vomit.

So, anti-emetic drugs and then start on the tablet morphine every 20 milligram every 4 hourly. This is stabilized the patient and another method which is available in this patient since he is a having a CA lung in thoracic chest wall. In tertiary care center you have anesthetist around or pain physician around and they can put epidural and relieve his pain instantly.

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### Which is the best route for morphine?

- Morphine is effective by all routes: oral, rectal, sublingual, subcutaneous, intramuscular, intravenous.
- The sublingual dose is equivalent to the oral or rectal dose.
- When changing from the oral or rectal route to one of the other systemic routes (subcutaneous, IM or IV), cut the dose in half.

Tolerance sometimes develops to morphine administered by the IV route

Which is the best route of morphine. It is a wonderful drug it is effective by oral route, rectal route, sublingual route, subcutaneous route, intramuscular route, intravenous route, intrathecal, epidural all routes it is very good analgesic. Sublingual dose is equivalent to oral or rectal dose.

So, sometimes you know when our patients are not able to swallow or they are little bit comatose then we give morphine sublingually just one tablet or half tablet below the tongue it gives very good analgesia. The dose remains same what you are giving orally. When changing from oral to oral or rectal route to one of the IV route then you have to decrease the dose half. Tolerance to morphine is very interesting subject to discuss and lots of research has been taken upon this subject. It has been observed that tolerance to morphine develops only when it is given in IV route continuously for long time.

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## Morphine Myths

### I. Tolerance

(common fear of Physicians as well as Patients.

In fact, 90% of patients never need more than 60mg of oral morphine every 4 hours, irrespective of duration of use.)

### II. Addiction

(No withdrawal symptoms when pain is relieved by Nerve Block)

### III. Respiratory depression

(In one study of 20 cancer patients (12 with COPD) taking at least 100mg of morphine per day for at least 7 days, only one had an elevated pCO<sub>2</sub> level.)



There are certain myths amongst the health care professionals also as long as morphine is concerned and even among the patient. One of my educated patient he had severe pain he had recurrence of the disease in the head and neck cancer and I told him that it is now you will need to take morphine for your pain management. He said madam then what will happen in later stage why not to keep this in my end stage because they have wrong myth that morphine can be given only when the patient is dying or when cancer is too much

advanced. No sometimes we have to give morphine right at diagnosis also because some type of tumor which are invading the nerve root or that particular area then I have giving severe pain then you might have to start morphine right at stage 1. Secondly among the doctors it is a myth that if you start morphine early later on he will require very large dose of morphine because the patient will develop tolerance.

Tolerance means patient will require to keep on increasing the dose of morphine as the duration advances, it is not so. A very good study has been done a very old study, but where they have given very large dose of morphine over a long time to the patient and they observed that there was no tolerance developed means same dose of morphine will relieve the pain of the patient. Morphine dose needs to be increased in at the time disease progresses because of the disease is progressing because they he develops metastasis because the tumor recurrence happens or recurrent tumor becomes enlarged and invades some vessels and nerves that is why you need to increase the dose of the morphine. So, tolerance does not happen with the dose which we are using in our practice like 60 milligram or 120 milligram per day. Second is there is a always fear that patient will become addicted to morphine, answer is big no.

As long as you have got patient has got pain moderate to severe pain he will not develop addiction to morphine and if you give morphine he will not develop, but a normal person like me and you who does not have pain and takes morphine regularly we will develop addiction. And this is observed by in certain situation few of our patient they are on morphine and then we realize that he can be relieved with a no block like patient of CA stomach he can be relieved by celiac plexus block. So, we take a appointment of CT scan department to do celiac plexus under CT guided and after giving celiac plexus effective and pain relief is there he is completely pain free he now he does not require morphine though he was taking 60 milligram morphine per day previous before block. Now suddenly we withdraw morphine we just reduce the dose for another 1 or 2 days and then cut off morphine in spite of that patient does not develop withdrawal symptoms this shows that patient does not develop any addiction to morphine. Another myth among doctors is morphine causes respiratory depression this is what we have studied in pharmacology.

But in one of the study you will see that even patient with COPD, asthma like patients whose respiratory drive is maintained by CO<sub>2</sub> retention and all even they when they are having cancer and given morphine they will there they will not develop respiratory depression. In fact, like my previous one of the talk of symptom management respiratory symptom management we discuss about giving morphine for dyspnea, patients who are breathless because morphine will cut down the unnecessary respiratory drive and will cause make patient comfortable decrease the respiration and decrease the breathlessness. So, these are the myths needs to be take needs to be understood by all these facts and one should start using morphine in their practice whenever required.

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### Can morphine be started too early?

**No.**

A common fear of doctors is this: "If morphine is started now the patient's body will develop tolerance. Higher and higher doses will be needed. When pain worsens later, it will no longer be effective."

**This does not occur.**

Sawe S et al.....

Studied pharmacokinetics Of  
high dose of morphine

Long term Rx with 10 to 20 fold  
Increase of oral dose over a period of  
6 – 8 mths doesn't change kinetic of morphine

This is already discussed is it too early to start morphine? Yes, you can start morphine as long as patient has pain that is must, relief of pain is primary importance rather than holding the morphine back for the future days. This was the study I was mentioning that they studied pharmacokinetic of high dose of morphine and which is treated for long term with 10 to 20 fold increase of oral dose over a period of 6 to 8 men and there was no change in pharmacokinetics of the morphine. This shows that patient do not develop tolerance with oral morphine.

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## Morphine intolerance

- Gastric stasis
- Sedation
- Delirium/hallucinations
- Myoclonus
- Vestibular stimulation
- Pruritus
- Bronchoconstriction



**Not much scope for Opioid Rotation**

Few of the patient do shows in tolerance to morphine, very few patients. Few of the patient has continuous nausea vomiting because of gastric stasis and they need to change over to some other END's. Few patients has excessive sedation, few patients has delirium and hallucination, few patients has myoclonus. One of my head and neck patients he was though he was in advanced stage he had myoclonus of one limb only on morphine treatment, vestibular stimulation, pruritus which which is also very commonly found, but still manageable and bronchoconstriction. So, in this patient this statement is wrong now because now we have got methadone and fentanyl available for opioid rotation.

So, in this type of patient you have to change over to another END's. Stop morphine and put the patient on fentanyl patch or methadone. Now it is available syrup methadone which is 50 times potent than morphine wonderful drug. Only it has got a effect on cardiac effect and because of that it is to be used very cautiously frequent follow up, frequent ECG monitoring and electrolyte monitoring is required. So, there is always a scope for opioid rotation we call it change over from one opioid one END to another END.

Counseling of patient when you are prescribing morphine for the first time counseling of patient and relative regarding the side effect of morphine is must must and must and very important.

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### **Strategies for improving tolerance**

- ✓ Start with a low dose of Morphine & titrate slowly upwards
- ✓ Use short-acting preparations until established.
- ✓ Sedation often improves after 48 hours.
- ✓ Pain may appear to be morphine-resistant if under dosing
- ✓ Consider alternative opioids like (Tramadol, Fentanyl, oxycodone, methadone, Hydromorphone)
- ✓ Consider Interventional Procedures
- ✓ Often worth discussing with the palliative care team
- ✓ Consider other causes

How you can improve the tolerance? Start with low dose of morphine and slowly increase the dose. Do not start with very large dose at a time. Use first you use short acting preparation like immediate release and then change over to sustained release.

Sedation improves after 48 hours. Pain may appear to be morphine resistance if using underdose. So, check your dose whenever you feel the pain is not morphine resistance and patient is not improving check the dose. Consider alternate opioids like tramadol, fentanyl, methadone which is available here. You may consider interventional nerve blocks which will reduce the dose of morphine requirement. Always discuss when your patient is not responding to END's discuss with palliative care physician they have got better knowledge of END's and they have handle oral morphine in almost they were there 70, 80 percent of the patient.

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## How to take your medicines?



**Bring the remaining stock of medicines and wrappers**

- ✓ Take the medicines round the clock
- ✓ Do not take all tabs at a time
- ✓ Instructions about tabs on empty / full stomach
- ✓ Increase / decrease the dose

As I said counseling and communication with patient regarding morphine is must when you are prescribing them for the first time. Firstly first counseling is how you will take your medicine. So, you tell the patient to go to pharmacy collect their medicine come back to the department and here the nurse or a counselor will explain them how you will take this medicine. Take the morphine 4 hourly round the clock. Abhi aap hamare gaonse aye huae patient ko itna ye boldenge every char ganta main lena hain dabai usko samajmain nahi ayenga (Hindi phrase meaning Right now, if you just tell our village patient that they have to take the medicine every four hours, they won't understand it). But you have to explain them which are the timings in our hospital we have fixed the timings of the morphine given orally, morning 7 o clock, then 11 o clock, then 3 pm, then 7 pm and night 11 pm and middle of the night dose we combine over here and give double dose.

So, these are the fixed timing this is taught to each and every relative every nurse every one. So, whenever they see morphine they tell the patient . So, these are the fixed timings which are taught to patient. So, he will not miss the dose and his blood level will be maintained and he will have a good pain relief. Second thing we explain about the side effects and the first and foremost side effect is constipation, but this constipation is manageable.

Firstly as I said earlier you always prescribe Bisacodyl along with morphine. So, 2 tablets of Bisacodyl he has to take every night irrespective of anything unless he has got diarrhea. Secondly you explain the relative that this will cause constipation. So, have change in diet of the patient like giving more fluids we tell them to take one glass of lukewarm water in the morning, tell high take high fiber diet and also thing is advice. Thirdly tell the patient and relative not to use these tablet for any other person. Like apne ghar mein ho headache ke dabai hote hain sab log lehte hain (Hindi phrase meaning Everyone keeps headache medicine at home and takes it.) like Dynapar, Paracetamol. Papako hua toh lenenge mummyko hua toh bhi dhabai lenenge (Hindi phrase meaning If father has it, he will take the medicine and mother also take the same medicine.). Here we will explain this medicine is for pain relief, but only for the patient not anybody else should take and it should be kept away from the children.

So, these are all counseling we have to do and next time when you come you always bring the remaining stock of medicine jitni morphine bachiyee usse obhi lekar aao aur uske jo khali wrapper se dawai ke obhi lekar aao (Hindi phrase meaning bring whatever morphine is left, and also bring the empty wrappers of the medicine.). So, we will come to know that patient has taken this medicine properly or not round the clock or not and missing some medicines are missing. So, it is abused or misuse by somebody this whole picture will be clear if he follows all this instruction. So, never to take all the tablets at a time, morphine can be taken up at on empty stomach. kyun ki pehle dhawai saath baje lene hai (Hindi phrase meaning Because the medicine has to be taken at seven o'clock first).

Sometimes patient has not taken breakfast that time. So, they will say maine breakfast nahi liyaata isle nahili (Hindi phrase meaning I didn't take breakfast, that's why I didn't) not like that. Half tablet or one tablet of morphine he can take on empty stomach. We also advise patient to increase or decrease the dose on their own because half tablet one tablet here or there they can they have to adjust as per the pain of the patient. Suppose, saath baje half morphine lee aur gyara baje taq relief nahi hua (Hindi phrase meaning Took half a dose of morphine at 7 o'clock, but didn't get relief until 11 o'clock). So, instead of half at 11 he can take one. Then break through pain intermittently suddenly

kuch pain hua tha (Hindi phrase meaning if some pain is felt) he can take one extra tablet of morphine for the break through pain. So, all these instructions are given to the patient when they are given morphine for the first time.

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So, hospital can perform excellence when there is always care comfort and the intention of cure is there as far as palliative care is concerned. So, this was in short about the how to prescribe END's. Only a systematic setup of the your clinic systematic training of your staff, training of patient and relative and that is the whole thing behind the success of your morphine prescription. And if you follow this system your morphine patient will never misuse the morphine or abuse the morphine and you will get patients coming to you during their next with the smiling face and without any side effects and complication of END's. Thank you very much.