Drug: LISINOPRIL  
  
# Available Drug Strengths  
LISINOPRIL 5MG TAB;  
LISINOPRIL 10MG TAB;  
LISINOPRIL 20MG TAB  
  
# Mechanism of Action & How it Works / Helps  
Lisinopril helps lower blood pressure by reducing the production of a substance called Angiotensin II which causes the blood vessels to narrow. When the blood vessels open up, your blood pressure will be lowered. This medication has additional protective effect on your heart and kidneys as well.  
  
###CHUNK\_DELIMITER###  
  
# Indication Information for Lisinopril  
  
## Indication 1: Hypertension (HTN)  
  
### Summary Of Disease Condition  
High blood pressure, also called hypertension, is a condition in which the heart has to pump harder for blood to flow through narrowed blood vessels, leading to persistently raised pressure. It usually does not have any noticeable signs, but it can be harmful to your health if not managed. If left unchecked or untreated, it can damage your blood vessels, heart, kidney, eye or other organs over time and cause serious complications.  
  
### Additional Information On Disease  
Blood pressure refers to the force of the body's blood pushing against the inner walls of the blood vessels, especially the arteries. Each time the heart contracts, it pumps blood into the arteries. Your blood pressure doesn't stay constant throughout the day. It is lowest when you're sleeping, and rises when you get up and start moving about. It can also go up when you are excited, nervous or physically active.   
Blood pressure (BP) readings are expressed as a ratio of the systolic pressure (the first number or numerator), over the diastolic pressure (the second number or denominator). A blood pressure of 120/80 mmHg (millimetres of mercury) is expressed verbally as 120 over 80.  
A healthy blood pressure reading should be lower than 120/80 mmHg. Normal blood pressure is less than 120 mmHg systolic and 80 mmHg diastolic, and may vary from 90/60 mmHg to 120/80 mmHg in a healthy young woman. A blood pressure of 140/90 mmHg or higher indicates high blood pressure.  
  
### Disease Aetiology  
The most common type of high blood pressure is essential hypertension, and it develops over time, usually aused by a combination of genetic and lifestyle-related risk factors.   
Age  
As we grow older, our arteries may stiffen and narrow due to the build-up of plaque over the years, causing the heart to beat harder, thus developing high blood pressure.  
Smoking  
Smoking can raise our blood pressure temporarily and its chemicals can damage our artery walls, causing our arteries to narrow and stiffen.  
Unhealthy Diet  
A diet high in fat, sugar, or sodium can increase our risk of developing hypertension.  
Physical Inactivity  
Individuals who lead sedentary lifestyles tend to have a higher heart rate than those who are physically active. This means that the heart needs to work harder.  
Obesity/Overweight  
The heavier we are, the more blood is required to supply oxygen and nutrients around our body, thus increasing the pressure on our blood vessels.  
Alcohol Consumption  
Drinking too much alcohol can raise blood pressure to unhealthy levels. Having more than three drinks in one sitting temporarily increase blood pressure, but repeated binge drinking can lead to long-term increased blood pressure.  
  
### Non Pharmacological Counselling  
Here are some lifestyle tips if you have high blood pressure:  
1. Stick to a Healthy Diet. Avoid foods high in cholesterol and saturated fats such as animal fats, red meat (e.g. beef and lamb), coconut milk, palm oil.  
Instead, choose lean meats, fish, low-fat dairy products.  
Increase your intake of fruits and vegetables.  
Limit salt intake to 2,000 mg of sodium per day, or about 1 teaspoon (about 5g) of salt daily.  
2. Exercise Regularly. Aim for at least 150 minutes light to moderate activity per week, 30 mins per day. Walking, swimming, dancing - anything that gets your heart pumping counts.  
3. Watch Your Weight. It has been proven that maintaining a healthy body weight reduces the risk of high blood pressure.  
4. Quit Smoking. Not only can smoking raise your blood pressure, but it's also a risk factor for coronary artery disease and stroke.  
  
###CHUNK\_DELIMITER###  
  
# Administration Instructions  
- You may take this medication before food or after food.   
- Dosage form: tablet  
- Can it be crushed: Yes  
None  
  
# Medication Storage  
Store your medication in a cool, dry place away from heat, moisture and direct sunlight, such as in a cupboard  
  
###CHUNK\_DELIMITER###  
  
# Pregnancy & Breastfeeding Considerations  
- Pregnancy: Lisinopril is not recommended in pregnancy. It can affect your baby's kidneys, particularly if it's taken in the second and third trimesters of pregnancy. Please inform your healthcare professional if you are pregnant, planning to become pregnant or breastfeeding  
- Breastfeeding: It might be OK to take lisinopril while breastfeeding. Please inform your healthcare professional if you are pregnant, planning to become pregnant or breastfeeding  
  
###CHUNK\_DELIMITER###  
  
# Side Effects of Lisinopril  
  
## Side Effect 1: Allergy Reaction  
  
### Likelihood of side effect  
Rare but severe  
  
### Side effect symptoms  
Swelling of eyes and/or lips; rashes throughout the body; difficulty breathing; faintness  
  
### Management of side effects  
Seek immediate medical attention or visit the emergency department if symptoms are severe  
  
## Side Effect 2: Low Blood Pressure (Hypotension)  
  
### Likelihood of side effect  
Common  
  
### Side effect symptoms  
Giddiness or light-headedness, especially when you get up from a lying or sitting position  
  
### Management of side effects  
This is more likely to happen in the morning or when you first get out of bed. Getting up slowly may help.  
  
## Side Effect 3: Dry Cough  
  
### Side effect class specificity  
ACE-I  
  
### Likelihood of side effect  
Common  
  
### Side effect symptoms  
A dry, annoying cough that does not go away  
  
### Management of side effects  
Inform your doctor to discuss about possible alternative medications  
  
## Side Effect 4: Hyperkalaemia  
  
### Side effect class specificity  
ACE-I / ARB  
  
### Likelihood of side effect  
Rare but severe  
  
### Side effect symptoms  
Difficulty breathing, heart palpitations, chest pain, nausea, vomitting, muscle weakness / numbness / cramps  
  
### Management of side effects  
Your doctor may perform frequent blood tests to monitor your patassium levels while on this medication. Seek immediate medical attention at the hospital emergency department if you have these symptoms.  
  
###CHUNK\_DELIMITER###  
  
# Drug Interactions of Lisinopril  
  
## Interaction 1: Charcoal, Kaolin and Smecta  
  
### Impact of interaction  
These anti-diarrhoeal medication may reduce the absorption of other medication  
  
### Management of interaction  
Take these medication at least 2 hours apart from other medications/.  
  
## Interaction 2: Traditional Medicines  
  
### Impact of interaction  
Traditional medicines, such as traditional chinese medication, may lead to certain, unexpected interactions that could be harmful.   
  
### Management of interaction  
In general, it is always check with your doctor or pharmacist if it is ok to take particular traditional medicine.