

# [Case study and history of hypertension](https://assignbuster.com/case-study-and-history-of-hypertension/)

History of Present Illness: Mr. AS is an 85 year old Caucasian male with a past history of hypertension and chest pain who currently presents to us with dementia and complaints of not knowing how he got here. Our patient was diagnosed with hypertension at the age of 40 and developed chest pain at the age of 45 when he was told he needed a pace maker. The pace maker was placed and he has had no heart complications since then. At the age of 55 our patient was diagnosed with dementia which he lived with independently at home until two years ago when he had a stroke. He was admitted to ALF on April 28, 2009 where he was told that he had a stroke and could not walk. Mr. AS has been staying at the facility since admission. Our patient currently denies any chest pain, headaches or vision changes. Mr. AS does complain of a cough that becomes productive at times with clear sputum. He stopped smoking 20 years ago and has a 160 pack year history. He also states that he thinks he hears himself wheezing at times. Mr. AS states that his legs don’t allow him to walk anymore and that the exercises that are done with the walker hurt his arms. He states that he has feeling in his legs but that movement is the problem. Mr. AS stated during the interview that he has accepted the fact that he will not be able to walk again and that he is content with his life as long as he can breathe and talk. Our patient also stated that he has problems remembering recent events and is better at remembering events that occurred during his childhood.

## Past Medical History:

* Hypertension at the age of 40 which is controlled with medication.
* Chest pain at the age of 45 which was fixed with the placement of a pacemaker.
* Dementia was diagnosed at the age of 55
* Stroke at the age of 83
* Appendectomy at the age of 10 due to an appendicitis
* Inguinal hernia repair at the age of 10

## Current Medications

* Mirtazapine 15mg PO QD for depression
* Namenda 10mg PO Bid for treatment of alzheimer’s symptoms
* Allopurinol 300mg PO QD for hyperuricemia
* Aspirin 81mg PO QD for general health and relief of minor pain
* Certavite antioxidant 18mg PO QD to prevent vitamin deficiency and undernutrion
* Loratadine 10mg PO QD for allergies
* Nifedipine 90mg PO QD for treatment of hypertension and angina
* Metoprolol tartrate 25mg PO QD for treatment of hypertension and angina
* Nasal decongestant 0. 05% SP 2 sprays for each nostril Bid for allergies
* Omeprazole 20mg PO Bid for gastroesophageal reflux
* Aricept 10mg PO QD for dementia associated with alzheimer’s
* Tamsulosin HCl 0. 4mg PO QD for benign prostatic hyperplasia
* Zolpidem Tartrate 5mg PO QD for help sleeping
* Acetaminopen 500mg PO every 6 hours for high temperature

## Allergies

No known allergies

## Family History:

* Grandma had TB, patient could not remember cause or time of death and chart did not contain any information.
* Information about the mother and father could not be obtained by the patient or the chart.
* Information about siblings could not be obtained by the patient or the chart.
* Patient states that he has one son who has back pain and is overweight. No other information could be provided by the patient or the chart.
* Patient states that he has no grandchildren
* Married twice and both deceased, cause unknown by patient and not stated in chart.
* Family members will need to be contacted to obtain more information on history of cancer, hypertension, heart disease, diabetes mellitus, or psychological illnesses.

## Social:

Mr. AS is not married and has a girlfriend who lives in Miami Beach that occasionally visits the facility. Our patient is not sexually active, does not drink alcohol, does not use caffeine and denies any illicit drug use. Our patient stopped smoking 20 years ago and has a 160 pack year history. Mr AS during his free time at ALF makes clocks as gifts for his friends and staff members at ALF. He says that making clocks makes him happy and keeps him busy. Mr. AS is not on any specialized diet and eats everything that is served to him.

## ROS:

General- Mr. AS feels generally well, he does not complain of fatigue, fever or pain anywhere currently. He also denies any appetite changes.

Skin- Mr. AS denies any skin discoloration, bruising or bleeding.

Head- Patient denies any headaches or dizziness

Eyes- Patient states that he has had no change in his vision, and no blurry vision.

Ears- Patient states that he can hear in his right ear but not his left ear. He has no ringing in the ears or earaches.

Nose/Throat/Mouth- Patient denies any rhinorrhea, dry mouth or tooth ache. The patient complains of a tickling sensation in his throat when he talks that makes him cough.

Respiratory- Patient complains of a cough that is nonproductive but at times becomes productive and produces a clear sputum. He also states that he hears himself wheezing sometimes and this does not occur more at any particular time of the day.

Cardiovascular- Patient does not have chest pain or palpitations. He also did not complain of edema in his legs.

Gastrointestinal- Patient has constipation and reports having bowel movement once a month for the last 20 years. Patient denies vomiting after eating.

Genitourinary- Patient urinates 2-3 times a day and wears a diaper. Patient denies hematuria, polydipsia or polyuria.

Neruologic- Patient denies headache and states that he had a stroke two years ago. Since the stroke he has had weakness in both legs. He states that he has sensation in both legs but that movement is difficult. See HPI

Musculoskeletal- Patient does not have any joint pain. Patient does complain of arm muscle pain due to the walker that he uses for physical therapy.

Endocrine- Patient denies any changes in thirst and denies any unintentional weight loss

Hematopoetic- Patient does not complain of bleeding or bruising

Psychiatric- Patient states that he has a memory problem and that he cannot remember recent events but can remember more from his childhood. Patient denies depression and the SIGECAPS questions were negative. The patient does not have any thoughts of suicide and denies fluctuating moods.

## Physical Examination:

Vital Signs- Blood pressure 132/72 mmHg, Respiratory Rate 16 breaths/minute, Pulse rate 60 bpm, Temperature afebrile to touch, BMI 29

General- Patient is well groomed, overweight and appears his stated age. He is cooperative and oriented. He also does not appear to be in any acute distress.

Skin- A 2 cm wide circular shaped ulcer is present on the right ankle 1 cm above the medial malleolus. Another ulcer about 3 cm wide and circular is present on the left shin about 6 cm from the tibial tuberosity. The skin over the left leg is erythematous and hot to touch compared to the right leg.

HEENT- The head is normocephalic, no bumps scars or lesions present on the scalp. The conjunctiva are pink and well perfused and there are no signs of icterus in the sclera. No papilledema visualized and no flame hemorrhages or a-v nicking observed. Nasal septum is midline, no oral ulcers observed and the uvula and tongue were both midline. No signs of central or peripheral cyanosis. Hearing greatly impaired in the left ear. No discharge from either ear and no tenderness noted upon palpation. Trachea is midline. The thyroid was non palpable. No bruits heard over carotid. Preauricular, posterior auricular, occipital, tonsillar, submaxillary, submental, anterior cervical, posterior cervical, supraclavicular, and infraclavicular lymph nodes are all nonpalpable. The patient was found to have poor visual acuity and the eyes were slow to react to light. EOM were intact bilaterally.

Heart- No thrills were palpable in the aortic, pulmonic, tricuspid and mitral areas. Normal S1 and S2 heard in all 4 regions. No murmurs or extra heart sounds heard in all 4 areas of auscultation. No carotid bruits or distended jugular veins. The pulse rate was regular rhythm.

Lungs- Chest is symmetrical and the A: P is 2: 1. Upon auscultation of anterior and posterior chest wall, the left lung field breathe sounds were decreased in all lobes, the right lung field had wheezing present in all regions. Upon percussion there was normal resonance in the right lung in all regions but dullness in the left lung in all regions. No accessory muscles were used for respiration. No crackles were heard upon auscultation. The bilateral diaphragmatic excursion was 6 cm. Normal tactile and vocal fremitus.

Abdomen- Upon inspection from the foot of the bed, bulging flanks were present along with spider nevi. A scar from a feeding tube is present in the right upper quadrant. There were no bowel sounds and no bruits heard over the abdominal aorta, renal arteries, iliac arteries or femorals. Non palpable spleen and kidney. The liver edge was non palpable, and liver span was 6 cm. No masses or pulsations felt upon palpation, no guarding or rigidity in all quadrants. Normal tympanic sound heard upon percussion in each quadrant. CVA tenderness absent bilaterally.

Extremeties- Dorsalis pedis pulse and posterior tibial pulse were 1+ bilaterally. Non pitting edema in ankles bilaterally. Radial pulses were present bilaterally and symmetrical 2+.

Musculoskeletal- Motor strength in upper extremities was 4/5 bilaterally and lower extremities were 3/5 bilaterally. Upper extremities passive and active range of motion was full bilaterally. Lower extremities passive motion was full range and active range of motion was limited.

Neurological- The patient was alert and oriented. He was able to remember events that occurred years ago but not recent events. He is aware of his memory loss and dementia. The face was symmetrical, no drooping of the eyes or lips, and no drooling from the mouth present. No resting tremor noted. Sharp and dull discrimination in tact in lower extremities, and upper extremities and face. Poor finger to nose. Biceps, triceps and brachioradialis reflexes are normal bilaterally. Patellar and Achilles reflex and gait could not be determined due to physical restraints.

## LABS-

## 12/31/2010 Blood Tests:

Glucose 122 mg/dL (70-105mg/dL)

Bun/Cr 1. 35 mg/dL (0. 7-1. 3mg/dL)

## Problem List:

* Dementia
* Chest pain
* Cough and wheezing
* Depression
* Arm and leg weakness
* Routine physical exam
* Mini mental status examination
* Colonoscopy
* Digital rectal exam
* Pneumovax Vaccine
* Flu Shot

## Assessment:

Dementia- The signs and symptoms of dementia appear gradually with the first sign usually being short term memory loss. Dementia progresses in stages with early development presenting with memory and learning impairment. Changes in mood and language problems may also develop. The intermediate phase of dementia presents with the patient unable to remember new information and there is a loss of dependence during this stage due to personality changes and inability to remember to eat, and bathe. During this period the patient is no longer oriented to time and place and their pattern of sleep is disturbed which further aggravates their mood. The later phase of dementia results in complete dependence on others for survival and the patient becomes incapable of learning and memory formation and difficulties swallowing.

Our patient’s current status places him at the beginning of the intermediate phase of dementia. Mr. AS is unable to remember new information; experiences sleep pattern changes, has mood swings and is incapable of bathing himself. Mr. AS is still oriented to time and place and was able to correctly state where he was, how long he had been there, and his identification clearly. Our patient is incapable of remembering how he arrived to the facility and the events leading up to that point.

Diagnosis of dementia requires the presence of impairment of memory, both long and short. The criteria for dementia also includes: personality changes, and impairment of higher cortical function. These changes must also interfere with the patient’s life activities and must not occur only with delirium. Our patient meets all of the criteria for diagnosis of dementia.

If the patient reaches all criteria for dementia, then the etiology should be determined based on the history and physical exam. Types of dementia include: alzehimer’s, vascular, lewy body, frontotemporal and multi infarct dementia.

Alzheimer’s dementia is the most common and patients normally present with memory problems, word finding difficulties and have a history of getting lost in familiar places. Alzheimer’s dementia is a differential diagnosis in our case due to lack of information from the family. After obtaining more history from the family about the progression of the disease in this patient, we can make a definite diagnosis. Our patient is unable to give us information on his status from before his stroke and therefore could not provide information on the progression.

Vascular type dementia is dementia that occurs after a stroke or other cerebrovascular disease. Patients with vascular type of dementia usually present with neglect, aphasia, dyscalculia and apraxia. The family would need to be contacted in order to determine if the patient’s dementia progressed further after the stroke and determine what level he was at before the stroke.

Multi infarct dementia is dementia due to many small strokes in the brain. The risk factors for this type of dementia include: hypertension, atherosclerosis, smoking and stroke. Multi infarct dementia is a differential diagnosis due to no knowledge of strokes before the one two years ago. A CT scan would be helpful in detecting previous strokes.

Mr. AS is currently on medication that is indicative of alzheimer’s type of dementia which include: Mirtazapine 15mg PO QD for depression, Namenda 10mg PO Bid for treatment of alzheimer’s symptoms, Certavite antioxidant 18mg PO QD to prevent vitamin deficiency and undernutrion, Aricept 10mg PO QD for dementia associated with alzheimer’s, and Zolpidem Tartrate 5mg PO QD for help sleeping. These medications cannot cure alzheimer’s but can slow the progression; this is achieved by cholinesterase inhibitors like Aricept which increase the acetylcholine levels in the brain to improve mental capabilities.

Chest pain- The patient currently does not complain of chest pain. Mr. AS has a pacemaker that was placed 40 years ago and states that he has not had any complications since then. The cause of the chest pain could not be determined by the patient or the chart. Possible causes of chest pain include: heart attack, angina, aortic dissection, coronary spasm, pericarditis, gastroesophageal reflux, esophageal spasm, costochondritis, pulmonary embolism. Mr. AS’s medication list includes medications for both angina and gastroesophageal disease. The medications are, Omeprazole 20mg PO Bid for gastroesophageal reflux, Nifedipine 90mg PO QD for treatment of hypertension and angina, and Metoprolol tartrate 25mg PO QD for treatment of hypertension and angina. He is also on aspirin for pain management. All medications should be continued.

Cough and wheezing- The patient currently complains of a cough and wheezing. The patient stated that he remembers having asthma as an adult but this was not shown in the chart. Asthma is inflammation of the airways that causes shortness of breath, coughing and wheezing. The wheezing in asthma would present as bilateral and in our case our patient’s wheezing was only present in the right lung field. Wheezing without asthma in our patient could be due to a lung tumor. Mr. AS has a 160 pack year history putting him at risk of COPD, emphysema and a lung cancer. Lung tumors can grow and impinge on the bronchial tree which can cause one sided wheezing as is the case in our patient.

Depression- Depression is a common finding in patients with dementia. The patient currently does not present with depression and the SIGECAPS questions were negative. The patient does not have any thoughts of suicide and denies fluctuating moods. Mr. AS’s current medication for depression should be continued, Mirtazapine 15mg PO QD for depression. His current medication works by increasing the serotonin levels in the brain to help with depression and is showing its effects positively in our patient.

Arm and leg weakness- Mr. AS is currently receiving physical therapy at North Beach ALF for post stroke induced leg weakness. Our patient’s stroke has affected the part of his brain that controls his leg movement. Mr. AS’s upper extremities are being worked on for further strengthening to compensate the weakness in his lower extremities from post stroke.

Preventative Medicine- A mini mental status examination should be performed to assess the progression of our patient’s dementia. A colonoscopy and digital rectal exam should be performed to rule out colon cancer and prostate cancer and hyperplasia which are high risks in our patient population. The pneumovax vaccine and flu shot should be done as routine preventative measures in our patient. Our patient is currently on Tamsulosin HCl 0. 4mg PO QD for benign prostatic hyperplasia. The patient’s chart did not state any pervious diagnosis of benign prostate hyperplasia and should be followed up with a digital rectal examination.

## Plan:

The patient’s family will need to be contacted to obtain more information on illnesses that run in the family such as cancer, heart disease, hypertension, diabetes mellitus, or psychological disorders. Information about Mr. AS’s physical and mental status prior to admittance to the facility will also need to be obtained from the family to asses any changes in mood, and mental status.

A CT scan and MRI of the brain should be ordered to visualize changes occurring in cortical regions. An X-Ray should be ordered to visualize any pulmonary or cardiovascular changes such as a lung tumor or pulmonary edema. Pulmonary function tests should be performed to determine the type, obstructive or restrictive, of respiratory disease present in our patient.

All of Mr. AS’s medication should be continued and modified if new findings from imaging studies or pulmonary function tests are present. The patient must be monitored with cbc, MRI scans and X-Ray. Monitoring of the glucose and Bun/Cr should also occur, if the levels of these parameters are shown to increase then consideration of drug-drug interactions and adverse effects should occur and remodification of the current medication list should be done.