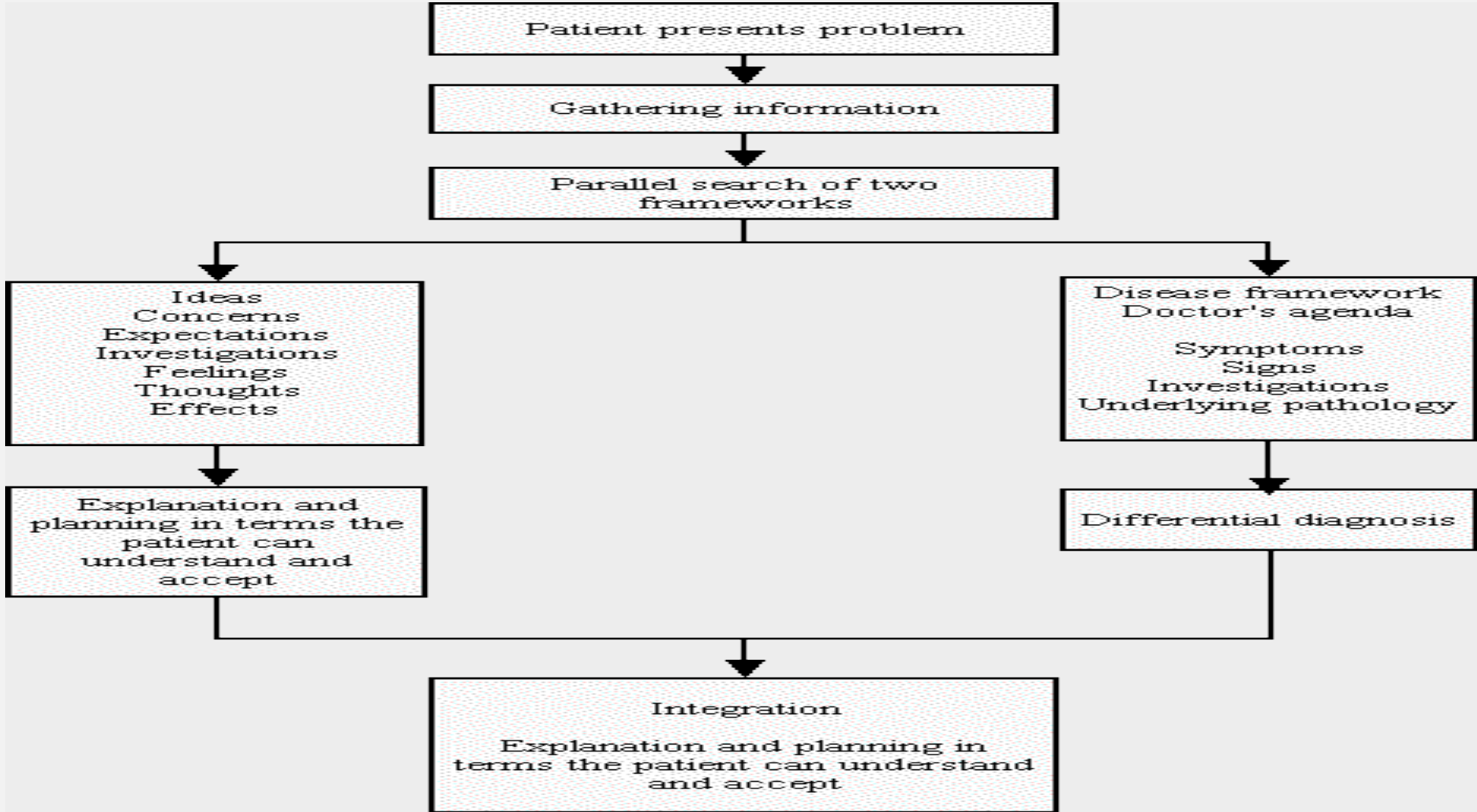


# Management in practice

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## PRESENTING COMPLAIN AND GATHERING INFORMATION



You are seeing a new patient in your office. He is a 47-year-old man with a presenting complaint of fatigue for several months.



He denies fever, rigors, cough, nausea, or diarrhea.



He has lost about 4kg . Upon questioning him you discover that he is also having nocturia most nights and is thirsty all the time.



He has asthma, for which he uses salbutamol metered dose inhaler occasionally.

- Gathering information



he has no other chronic medical problems and takes no other medications on a regular basis.



He has a family history of diabetes, hypertension, and heart disease.



He smokes about one pack per day, and he works as a teacher at the local high school.

**•Physical examination  
and investigation**



Physical examination reveals the following: T 37°C, BP 135/83 mm Hg, P 72 bpm, BMI 38 kg/m<sup>2</sup>.



Aside from obesity, the remainder of the examination is normal.



Laboratory test results reveal the following: normal CBC, BUN/creatinine, and electrolytes.



You ask him to return to the office the next day for fasting laboratory tests, which reveal a fasting glucose of 123 mg/dL and an HbA<sub>1c</sub> of 7.5%.

• **Does this patient have diabetes?**

**A**-Yes; he has an elevated fasting glucose.

**B**-Probably; he needs a second fasting glucose to confirm the diagnosis.

**C**-Probably; he needs a second HbA1c to confirm the diagnosis.

**D**-Yes; he has the classic symptoms of diabetes: fatigue, weight loss, and thirst, associated with an elevated glucose.

**E**-Probably not; his HbA1c is not >8%.

**THE CORRECT ANSWER IS C**

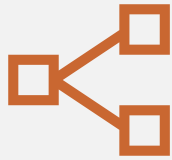


## EXPLANATION

- If results of two different diagnostic tests for DM are discordant, the test that is diagnostic of diabetes should be repeated.
- "A" and "B" are incorrect because the fasting glucose is  $<126$  mg/dL (the threshold for diabetes).
- "D" is incorrect because we do not have his random glucose value that is  $\geq 200$  mg/dL.
- "E" is incorrect because the A1c cutoff for diabetes diagnosis is  $\geq 6.5\%$



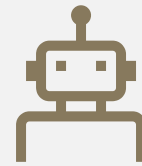
- **Assuming another A1c is above 6.5%, what further study must be done to complete the diagnosis of diabetes and determine whether the patient has type 1 or type 2 diabetes?**



**A-C-peptide**  
level.



**B-Anti-islet cell**  
antibodies.



**C-Anti-insulin**  
antibodies



**D-None of the**  
above.

The correct answer is **D**

• **Given his age, body habitus, and lack of exercise, you feel certain that this patient has type 2 diabetes. You provide some basic education on the nature of diabetes, its natural history, and what can be done to manage it.**

• **What is the most important next step for this patient?**

• **A-**Initiation of [insulin](#) therapy.

• **B-**Initiation of an ACE inhibitor

• **C-**Referral to an endocrinologist.

• **D-**Diabetic education classes.

• **E-**Initiation of glyburide or other sulfonylurea.

**THE CORRECT ANSWER IS D**

- Why

- A general education program that includes information on diet, disease management, and the family's role in successful diabetes care is the most important intervention listed.
- While specialist consultation may be useful in complex diabetic patients or in those who are not responding to treatment, generalist physicians provide care to the majority of patients with diabetes.
- [Insulin](#) therapy is not indicated at this point, and an ACE inhibitor may or may not be helpful depending on the patient's blood pressure and urine protein.
- "E" is also incorrect.



FOLLOW UP

• **At the next visit, you review the patient's medical record and try to assure that he is up to date on his preventive health care.**

- **Which of the following is NOT true regarding preventive services in diabetics?**
- **A-**Patients diagnosed with type 2 diabetes should have a dilated eye examination at the time of diagnosis.
- **B-**Patients with type 1 diabetes should have a dilated eye examination at the time of diagnosis if they are over age 12.
- **C-**Check TSH annually in type 1 diabetes, in patients with dyslipidemia or diabetic women over age 50 years.
- **D-**A urine microalbumin should be checked at least yearly in all type 2 diabetics.
- **E-**A foot examination using a 10 g nylon microfilament should be done annually for all diabetics.



THE CORRECT ANSWER IS **B**

- Explanation



Patients with diabetes type I should have an eye examination **3 to 5 years** after the diagnosis and then yearly.



Age at the time of diagnosis is not a factor in determining when an eye examination should be done.



# GUIDE LINES FOR FOLLOW UP

## DM TYPE I



Urine microalbumin starting at age 12 and then every 6 to 12 months.



Dilated eye examination 5 years after diagnosis and then annually.



HbA1c every 6 months for stable patients achieving glycemic goals, every 3 months for patients changing therapy or not meeting glycemic goals.

## DM TYPE I

Blood pressure screening at every visit.

Foot examination and screening for polyneuropathy at diagnosis and annually.

If not performed/available within past year

- Fasting lipid profile, including total, LDL, and HDL cholesterol and triglycerides, as needed
- Serum creatinine and calculated glomerular filtration rate
- TSH in type I diabetes, dyslipidemia, or women over age 50 years.

## •DM type 2



Same as DMI above, except:



Eye examination at time of diagnosis and then yearly.

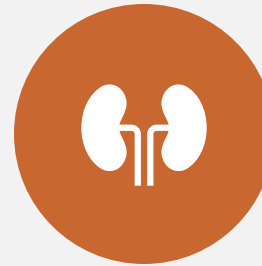


Urine microalbumin at the time of diagnosis and then every 6–12 months

**SPEAKING OF PREVENTION, YOUR PATIENT, NOW 48 YEARS OLD WITH HIS DIABETES CONTROLLED, ASKS IF HE SHOULD BE TAKING AN ASPIRIN DAILY TO PROTECT HIS HEART. YOU RESPOND:**



**A**"-Take aspirin 325 mg daily because it will lower your risk of myocardial infarction."



**B**"-Diabetes does not automatically qualify you for aspirin therapy. Let's check your atherosclerotic cardiovascular disease (ASCVD) score."



**C**"-The risks and benefits of aspirin in your case are unknown."



**D**"-Take it by the truckload. I've got a lot of stock in Bayer."

THE CORRECT ANSWER IS **B**



## •Why

- The ADA recommends considering aspirin therapy (75–162 mg/day) as a primary prevention strategy in those with type 1 or type 2 diabetes at increased cardiovascular risk (10-year risk  $\geq 10\%$ ).
- Who would be in this category of risk? Most diabetic men aged >50 years or diabetic women aged >60 years who have at least one additional major risk factor (family history of cardiovascular disease, hypertension, smoking, dyslipidemia, or microalbuminuria).

ADA RECOMMENDS AGAINST ASPIRIN USE FOR CVD PREVENTION  
FOR ADULTS WITH DIABETES AT LOW CVD RISK

(10-year CVD risk <5%, such as in men aged <50 years and women aged <60 years with no major additional CVD risk factors) since the potential adverse effects from bleeding likely offset the potential benefits.

If you decide to prescribe aspirin for primary CVD prevention in a diabetic, use 81 mg daily.



THANKS