Undifferentiated and miscellaneous presentations

Suspected cancer

Key thoughts

Practical points

- **Diagnosis.** Diagnosing cancer early on clinical grounds alone can be difficult. It is important to think about the possibility of cancer if symptoms are unusual or persistent. A number of cancers may present with typical features.
- **Referral.** Early diagnosis of cancer will in many cases improve the prognosis. Symptoms and signs of cancer should prompt urgent referral for further investigation and management.

RED FLAGS

- Unusual symptom patterns
- No improvement of symptoms over time
- New onset alarm symptoms (e.g. haematuria, haemoptysis, dysphagia or rectal bleeding)
- Three or more consultations for the same problem

History

Ideas, concerns and expectations

- **Ideas.** Explore patient beliefs about cancer – there are many myths about the disease.
- **Concerns.** Patients often worry about the possibility of cancer. Explore if there are particular reasons why the patient is concerned (e.g. reading a newspaper article, diagnosis of cancer in a friend or relative or the presence of risk factors such as smoking).
- **Expectations.** What does the patient expect in terms of investigation and treatment?

History of presenting complaint

- **Onset.** Symptoms of cancer usually start gradually and develop over weeks and months.
- **Progression.** Aggressive tumours may grow and spread rapidly.

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- **Severity and quality of life.** How severe are the symptoms and how far do they affect the quality of life? Are there any activities that the patient cannot do anymore?
- **Context.** How do the symptoms fit into the context of this person's life?

Non-specific symptoms

- **Weight and appetite.** Progressive, unintentional and unexplained weight loss with or without reduced appetite may indicate cancer, particularly if there is no other obvious physical or psychological cause.
- **Nausea and vomiting.** These are particularly common with upper gastrointestinal cancers.
- **Tiredness.** Fatigue is a common non-specific symptom of many cancers (especially haematological) but may also be due to iron deficiency anaemia caused by gastrointestinal tumours.
- **Fever and night sweats.** Particularly common with haematological cancers.
- **Lymphadenopathy.** Swollen lymph nodes are commonly due to infection but may also be caused by lymphoma or metastatic disease.
- **Infections.** Cancer may affect the immune system, increasing the risk of concomitant and recurrent infections.

Risk factors for cancer

- **Smoking.** Smoking is linked to various cancers (particularly lung, bladder and cervix).
- **Age.** Many cancers become more common with age.
- **Toxins.** Ask about drug use as well as industrial and occupational exposures. Certain chemicals are risk factors for bladder cancer. Alcohol and chronic hepatitis may lead to liver cancer. Asbestos exposure may cause lung cancer.
- **Previous cancer.** Always ask about a past history of cancer as this increases the risk of recurrence.

Lung cancer

- **Cough.** A chronic, persistent and treatment–resistant cough is a common presenting symptom.
- **Haemoptysis.** This is an important symptom in smokers or ex-smokers over the age of 40.
- **Hoarseness.** This may occur if the recurrent laryngeal nerve is affected.
- **Other chest symptoms.** Ask about chest pain, shortness of breath as well as shoulder and arm pain (Pancoast tumour).
- **Underlying respiratory problem.** Ask about any unexplained changes in existing symptoms if there is an underlying chronic respiratory problem such as asthma or COPD.

Upper gastrointestinal cancer

- **Gastrointestinal symptoms.** Important symptoms are unexplained upper abdominal pain in conjunction with weight loss (with or without back pain),

chronic gastrointestinal bleeding, dyspepsia, dysphagia and persistent vomiting.
- **Jaundice.** The presence of jaundice should raise concern, particularly if associated with other gastrointestinal symptoms.
- **Anaemia.** Unexplained iron deficiency anaemia suggests possible upper or lower gastrointestinal cancer.

Lower gastrointestinal cancer

- **Rectal bleeding.** Fresh blood dripping into the toilet pan is common with haemorrhoids. Rectal bleeding raises the possibility of cancer if associated with a change in bowel habit to looser stools (without anal symptoms) and in patients aged over 40. Any rectal bleeding in patients over the age of 60 is suspicious. Blood mixed with stool is suggestive of a higher lesion.
- **Change in bowel habit.** 'Looser stools and/or increased stool frequency persisting for 6 weeks or more and without anal symptoms are suggestive of malignancy, particularly in patients over the age of 40 and/or if associated with rectal bleeding.'

Breast cancer

- **Breast lump.** Consider breast cancer if a lump, which persists after the next period, presents after the menopause or enlarges.
- **Family history.** There may be a positive family history.
- **Past history.** Ask about a past history of breast cancer.
- **Skin changes.** Ask about nipple distortion, nipple discharge (particularly if blood is present) or unilateral eczematous skin changes that do not respond to topical treatment.

Gynaecological cancer

- **Post-menopausal bleeding.** This should raise suspicions if the woman is not on hormone replacement therapy, continues to bleed 6 weeks after stopping therapy or if she is taking tamoxifen.
- **Vaginal discharge.** Women with vaginal discharge should be offered a full pelvic examination including visual assessment of the cervix.
- **Vague, unexplained abdominal symptoms.** Bloating, constipation, abdominal pain, back pain and urinary symptoms may all suggest ovarian cancer (particularly in women over 50 years of age), although benign causes are much more common.
- **Intermenstrual bleeding.** Ask about any persistent intermenstrual bleeding and alterations in the menstrual cycle. Is there post-coital bleeding?
- **Vulva.** Any unexplained vulval lump or bleeding vulval ulceration is suspicious.

Urological cancer

- **Urinary symptoms.** In men, ask about lower urinary tract symptoms such as hesitancy, poor stream and haematuria. Is a recent prostate specific antigen (PSA) result available? Recurrent or persistent urinary tract infection, particularly if associated with haematuria, may suggest cancer.

- **Testicular mass.** Any swelling or mass in the body of the testis is suspicious.
- **Penis.** Signs of penile carcinoma include progressive ulceration in the glans, shaft or prepuce of the penis. Lumps within the corpora cavernosa can indicate Peyronie's disease.

Haematological cancer

- **General symptoms.** Consider haematological cancer if there are symptoms such as night sweats, bruising, fatigue, fever, weight loss, generalised itching, breathlessness, recurrent infections, bone pain, alcohol-induced pain or abdominal pain, either alone or in combination.
- **Back pain.** Spinal cord compression or renal failure may occur with myeloma and will require immediate referral.

Skin cancer

- **Non-healing skin lesions.** Any non-healing keratinising or crusted tumour larger than 1 cm with induration on palpation should raise suspicions of skin cancer.
- **Sun exposure.** Ask details about previous sun exposure and frequency of sun burns.
- **Features of melanoma.**

- Change in size
- Change in colour
- Irregular shape and borders
- Irregular and dark pigmentation
- Largest diameter 7 mm or more
- Change in sensation/itching
- Bleeding

Head and neck cancer

- **Lumps.** Any unexplained lump in the neck of recent onset or a previously undiagnosed lump that has changed over a period of 3–6 weeks is suspicious. Of concern are also unexplained and persistent swellings of the parotid or submandibular gland.
- **Pain.** An unexplained persistent sore or painful throat or other pain in the head or neck for more than 4 weeks may suggest underlying cancer, particularly if associated with otalgia and normal otoscopy.
- **Ulcers.** Any unexplained mouth ulcer, mass or patches of the oral mucosa persisting for more than 3 weeks are suspicious, particularly if there is associated swelling or bleeding.
- **Thyroid swelling.** Any solitary nodule increasing in size, a history of neck irradiation, a family history of endocrine malignancy, unexplained hoarseness or voice changes, cervical lymphadenopathy as well as lumps in pre-pubertal patients or patients over 65 years of age raise the possibility of thyroid cancer.

- **Other symptoms.** Unexplained loosening of teeth or hoarseness persisting for more than 3 weeks requires further investigation or referral. Heavy drinkers and smokers over the age of 50 are especially at risk.

Brain tumour

- **Headaches.** Look out for features of raised intracranial pressure (e.g. vomiting, drowsiness, posture-related headache), pulse-synchronous tinnitus or other neurological symptoms including blackout or change in personality or cognitive function. Any headache that is worse in the morning and gets progressively worse or changes its character should raise suspicions.
- **CNS symptoms.** Consider the possibility of brain tumour if there is progressive neurological deficit, new onset seizures, mental changes, cranial nerve palsy or unilateral sensorineural deafness.

Features suggestive of metastasis

- **Brain.** Ask about new and persistent headaches, fits or any change in personality (also see section on brain tumour above).
- **Bone.** Bone pain due to malignancy is often intermittent at first and then becomes constant. It commonly keeps patients awake at night. Pathological fractures may occur.
- **Liver.** Metastases may not cause any symptoms. Features may include anorexia, fevers, nausea, jaundice, right upper quadrant pain, sweats and weight loss.
- **Skin.** These may present as new nodules or non-healing ulcerative skin lesions.

Social history

- **Home.** Ask about family circumstances and support network. Are home life and hobbies affected by any of the symptoms?
- **Work.** Are there any problems with work? Ask about exposure to carcinogens including asbestos which is a risk factor for lung cancer and mesothelioma.

Review of previous investigations

- **Full blood count (FBC).** A recent FBC showing unexplained anaemia with haemoglobin of $<$11 g/dl in men and 10 g/dl in women suggests the possibility of cancer. A blood film may suggest haematological cancer.
- **Inflammatory markers.** Raised plasma viscosity or CRP suggests a general inflammatory response.
- **PSA.** A raised PSA can indicate prostate cancer, particularly if values have been rising and if there are associated urinary symptoms.
- **Chest X-ray.** Look for opacities suggesting primary lung cancer or metastases. Pleural effusion and slowly resolving consolidation can be signs of lung cancer.
- **Smear test.** In women, check results from the last smear test. Does she take part in a screening programme?
- **Mammogram.** Are results from a previous mammogram available (women only)?
- **Barium enema, colonoscopy or gastroscopy.** Ulcerative colitis and polyposis coli increase the risk of colorectal cancer.

Examination

General

- **General condition.** Look for evidence of muscle wasting and assess general nutritional status.
- **Finger clubbing.** May indicate primary or secondary lung cancer.

Vital signs

- **Temperature.** Raised temperature can occur with some cancers or if there is associated infection.
- **Respiratory rate.** Stridor and tachypnoea are late signs of lung cancer.

Skin

- **Inspection.** Look for evidence of metastasis such as nodules and other new or non-healing lesions.

Head and neck

- **Sclerae.** Look for jaundice (biliary obstruction, liver involvement).
- **Palpate lymph nodes.** Cervical or supraclavicular lymphadenopathy may be present in cancers such as lung cancer or lymphoma. Lymph nodes that persist for 6 weeks or more, increase in size, are >2 cm in size, are widespread and are associated with splenomegaly +/− weight loss may indicate haematological cancer.
- **Face and neck swelling.** Facial swelling with fixed elevation of jugular venous pressure can indicate superior vena cava obstruction (advanced cancer).

Chest

- **Lungs.** Listen for any chest signs that may be caused by lung cancer (e.g. bronchial breathing, monophonic wheeze).
- **Breasts.** In women, consider checking the breasts for lumps. Consider cancer in women of any age if there is a discrete hard lump with or without fixation or skin tethering. Is there any nipple distortion or obvious discharge?

Abdomen

- **Palpation.** Search systematically for an epigastric (e.g. stomach cancer) or right-sided lower abdominal mass (e.g. colon cancer).
- **Liver and spleen.** Liver metastases may be impossible to detect clinically. Hepatosplenomegaly may occur with haematological cancers.
- **Rectal examination.** A rectal examination is important in the work-up of any patient with unexplained symptoms relating to the lower gastrointestinal or urogenital tract. Important features are inflammatory or obstructive lower urinary tract symptoms, erectile dysfunction, haematuria, lower back pain, bone pain and weight loss (especially in the elderly). A palpable intraluminal rectal mass suggests cancer of the rectum. A pelvic mass outside the bowel is more suggestive of urological or gynaecological cancer. In men, assess the size, consistency and regularity of the prostate gland.

Vaginal examination in women with symptoms suggestive of cancer

- **Inspection.** Look for any obvious vulval ulceration.
- **Pelvic examination including speculum assessment.** This should be performed in all women who present with alterations of the menstrual cycle, intermenstrual bleeding, post-coital bleeding, post-menopausal bleeding or vaginal discharge. Search in particular for any adnexal or uterine masses, the presence of vaginal discharge and signs of cervical cancer.

Lower limbs

- **Leg swelling.** Cancer is a risk factor for deep venous thrombosis.

Key references and further reading

1. National Institute for Health and Clinical Excellence. Referral guidelines for suspected cancer. Clinical Guideline 27, 2005. Available at www.nice.org.uk.
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