

READING TEST 15

PART A

TIME: 15 minutes

- Look at the four texts, A-D, in the separate Text Booklet.
- For each question, 1-20, look through the texts, A-D, to find the relevant information.
- Write your answers on the spaces provided in this Question Paper.
- Answer all the questions within the 15-minute time limit.
- Your answers should be correctly spelt.

Text A

Eczema / Dermatitis

The words `eczema` and `dermatitis` are often used synonymously to describe a polymorphic pattern of inflammation, which in the acute phase is characterized by erythema and vesiculation, and in the chronic phase by dryness, lichenification and fissuring. Contact dermatitis describes these patterns of reaction in response to external agents, which may be acting either as irritants, where the T cell-mediated immune response is not involved, or as allergens, where cell-mediated immunity is involved. Contact dermatitis may be classified into the following reaction types: Subjective irritancy ± idiosyncratic stinging and smarting reactions that occur within minutes of contact, usually on the face, in the absence of visible changes. Cosmetic or sunscreen constituents are common agents. Acute irritant contact dermatitis is often the result of a single overwhelming exposure or a few brief exposures to strong irritants or caustic agents. Chronic irritant contact dermatitis occurs following repetitive exposure to weaker irritants, which may be either `wet`, such as detergents, organic solvents, soaps, weak acids and alkalis, or `dry`, such as low humidity air, heat, powders and dust.

Text B

Patch testing

The mainstay of diagnosis in allergic contact dermatitis is the patch test. This test has a sensitivity and specificity of between 70% and 80%¹⁵. Patch testing involves the reproduction under the patch tests of allergic contact dermatitis in an individual sensitized to a particular antigen(s). The standard method involves the application of the antigen to the skin at standardized concentrations in an appropriate vehicle and under occlusion. The back is most commonly used principally for convenience because of the area available, although the limbs, in particular the outer upper arms, are also used. Various application systems are available of which the most commonly used are Finn chambers. With this system, the investigator adds the individual allergens to test discs that are loaded on to adhesive tape. Available are available \pm the TRUE and the Epiquic tests. There are few comparative studies between the different systems. Pre-prepared tests are significantly more reliable than operator-prepared tests. There is also some evidence that larger chambers may give more reproducible tests. However, this may only apply to some allergens. The open patch test, not so common, is used where potential irritants or sensitizers are being assessed. It is also useful in the investigation of contact urticaria and protein contact dermatitis. The open patch test is usually performed on the forearm but the upper outer arm or scapular areas may also be used. The site should be assessed at regular intervals for the first 30 \pm 60 min and a later reading should be carried out after 3 \pm 4 days. A repeated open application test, applying the suspect agent on to the forearm, is also useful in the assessment of cosmetics, where irritancy or combination effects may interfere with standard patch testing. This usually involves the application of the product twice daily for up to a week, stopping if a reaction develops.

Text C

Photopatch testing

Where photoallergic dermatitis is suspected, photopatch testing may be carried out. Very briefly, the standard method of photopatch testing involves the application of the photo allergen series and any suspected materials in duplicate on either side of the upper back. One side is irradiated with ultraviolet (UV) after an interval (1 or 2 days) and readings are taken in parallel after a further 2 days. The exact intervals for irradiation and the dose of UVA given vary from centre to centre. The U.K. multicentre study into photopatch testing has now been completed and published. It is recommended that allergens be subjected to 5 J cm² UVA and a reading to be taken after 2 days. The incidence of photoallergy in suspected cases was low at below 5%; however, further readings at 3 and 4 days increased the detection rate.

Text D

There are a number of aspects, which can have their effect on the accuracy of patch testing. Principal among these are the characteristics of the individual allergens and the method of patch testing. Some allergens are more likely to cause irritant reactions than others. These reactions may be difficult to interpret and are easily misclassified as positive reactions. Nickel, cobalt, potassium dichromate and carba mix are the notable offenders in the standard series. As indicated above, pre-prepared patch tests are better standardized in terms of the amount of allergen applied and are therefore more reproducible, but are prohibitively expensive in the U.K. Patient characteristics are also important. It is essential that the skin on the back is free from dermatitis and that skin disease elsewhere is as well controlled as possible. This will help to avoid the 'angry back syndrome' with numerous false positives. However, if a patient applies topical steroids to the back up to 2 days prior to the test being applied or is taking oral corticosteroids or immunosuppressant drugs, then there is a significant risk of false negative results.

Questions 1-7

For each question, 1-7, decide which text (A, B, C or D) the information comes from. You may use any letter more than once.

In which text can you find information about;

1. One of the most common tests.

Answer _____

2. The blockage or closing of a blood vessel or hollow organ.

Answer _____

3. Important factors that may influence the testing results.

Answer _____

4 .The condition that occurs in response to excessive itching or rubbing of the skin.

Answer _____

5. Two different types of tests which help in diagnosing the disease condition.

Answer _____

6 .The process or fact of irradiating or being irradiated.

Answer _____

7 .Splitting or cracking of the skin.

Answer _____

Questions 8-14

Answer each of the questions, 8-14, with a word or short phrase from one of the texts. Each answer may include words, numbers or both.

8. Which test is known to be more helpful with respect to the determination of other irritants, which make it difficult to carry out other tests?

Answer _____

9. What are given orally or by injection and distribute throughout the body?

Answer _____

10. In which process do we apply the product two times?

Answer _____

11. What would be the outcome of the pre-prepared patch test, if there is dermatitis on the back of the skin?

Answer _____

12. What are the common precipitants of contact dermatitis?

Answer _____

13. What would be the outcome of the test, if the patient applies topical steroids two days prior to the test?

Answer _____

14. What was the proportion of photoallergic incidents in suspected cases?

Answer _____

Questions 15-20

Complete each of the sentences, 15-20, with a word or short phrase from one of the texts. Each answer may include words, numbers or both.

15. _____ as the cumulative irritant is known to create more worsening conditions.

16. The open patch is carried in order to examine the potentiality of the _____ or irritants.

17 .The chronic phase of a polymorphic pattern of inflammation is characterized by _____.

18. Carba mix is one of the _____ in the standard series.

19. The standard method of testing involves the application of the _____.

20. As per recommendations, allergens be subjected to _____.

PART B

In this part of the test, there are six short extracts relating to the work of health professionals. For questions 1-6, choose the answer (A, B or C) which you think fits best according to the text.

Questions 1-6

1 The notice talks about;

A How blood clots occur.

B Blood clot doesn't form. (if the reaction doesn't occur the way it should)

C Blocking of clotting reaction.

VKCFD

Inherited combined deficiency of the vitamin K dependent clotting factors is a very rare inherited bleeding disorder that is caused by a problem with clotting Factors II, VII, IX, and X. VKCFD can also be acquired later in life as a result of other disorders, or certain medications such as the blood-thinning drug Coumadin.

Acquired VKCFD is more common than the inherited form. Some newborn babies have a temporary vitamin K deficiency, which can be treated with supplements at birth. In order to continue the chain reaction of the coagulation cascade, these four factors need to be activated in a chemical reaction that involves vitamin K.

VKCFD is an autosomal recessive disorder, which means that both parents must carry the defective gene in order to pass it on to their child. It also means that the disorder affects both males and females.

2 What is correct?

- A All types of Factor I deficiency affect both males and females.
- B The fibrogen defect in impairment leads to disorder.
- C Genes can be both recessive or dominant.

Factor I deficiency

It is an umbrella term for several related disorders in males and females, known as congenital Fibrinogen defects. Afibrinogenemia (a lack of Fibrinogen) and hypofibrinogenemia (low levels of Fibrinogen) are quantitative defects, meaning the amount of Fibrinogen in the blood is abnormal. Dysfibrinogenemia is a qualitative defect in which Fibrinogen does not work the way it should. Hypodysfibrinogenemia is a combined defect that involves both low levels of Fibrinogen and impaired function. Afibrinogenemia is an autosomal recessive disorder, which means that both parents must carry the defective gene in order to pass it on to their child. Hypofibrinogenemia, dysfibrinogenemia, and hypodysfibrinogenemia can be either recessive (both parents carry the gene) or dominant (only one parent carries and transmits the gene).

3 What is referred to as "weak muscle"?

A Chronic fatigue

B Brachymesophalangy

C Hypotonia

2q37 deletion syndrome

It is a condition that can affect many parts of the body. This condition is characterized by hypotonia in infancy, mild to severe intellectual disability and developmental delay, behavioral problems, characteristic facial features, and other physical abnormalities.

Most babies with 2q37 deletion syndrome are born with potentially chronic fatigue, which usually improves with age. About 25 percent of people with this condition have autism, a developmental condition that affects communication and social interaction.

The characteristic facial features associated with 2q37 deletion syndrome include a prominent forehead, highly arched eyebrows, deep-set eyes, a flat nasal bridge, a thin upper lip, and minor ear abnormalities. Other features of this condition can include short stature, obesity, unusually short fingers and brachymesophalangy, sparse hair, heart defects, seizures, and an inflammatory skin disorder called eczema. A few people with 2q37 deletion syndrome have a rare form of kidney cancer called Wilms tumor.

4 The notice talks about;

A Every kind of procedure is used in the process of sterilization to keep sterile the objects or articles that are to be introduced into a wound or body cavity or that is to penetrate the skin;

B General overview of sterilization techniques;

C The practices that the nurses will have to focus on;

Sterile technique

Surgical asepsis is used to maintain sterilize. Use of effective sterile technique means that no organisms are carried to the client. Microorganisms are destroyed before they can enter the body. Sterile technique is used when changing dressings, administering parenteral (other than the digestive tract) medications, and performing surgical and other procedures such as urinary catheterization. With surgical asepsis, first articles are sterilized, and then their contact with any unsterile articles is prevented. When a sterile article touches an unsterile article, it becomes contaminated. It is no longer sterile.

5 It is known to prevent viral infection;

A PEG-IFN, RBV

B Boceprevir

C Sofosbuvir

Treatment for HCV

Before the commencement of HCV treatment, it is necessary to genotype the virus as different genotypes require different types and duration of treatment, and the protease inhibitors.

Current therapy for genotype 1 infection is a combination of PEG-IFN, RBV and a PI or nucleotide polymerase inhibitor, which results in high rates of sustained virological response (SVR; a negative HCV RNA test three or six months after the end of treatment). Boceprevir, simeprevir and telaprevir can also be used. Dual therapy with PEG-IFN and RBV or sofosbuvir with RBV is used for genotypes 2 and 3 infections. Patients with genotype 4 infection treated with treated with sofosbuvir, PEG-IFN and RBV have similar response rates when compared with genotype 1-infected individuals. Small studies of genotypes 5- and 6-infected patients have shown similar SVR rates to genotypes 2- and 3-infected ones.

6 The notice talks about;

A Rate of heterogeneity of genitourinary sarcomas.

B Survival rate and diagnosis.

C Survival rates of patients with genitourinary sarcomas.

Patients with genitourinary sarcomas

Patients with genitourinary sarcomas are relatively in a bad state, when compared with other soft tissue regions. Prognosis is relatively poor and can be explained by the high proportion seen in high degree tumors, a large proportion of patients with metastatic disease, large tumor and the area affected. In addition, the rarity and heterogeneity of genitourinary sarcomas can explain the great variability in clinical progress in different subgroups. Dissemination of urethral cancer follows the anatomic subdivision. The anterior urethra has a lymphatic drainage system for superficial and deep inguinal region. Posterior urethra drains the lymphatic ganglion of the external iliac artery, hypogastric, and internal obturator muscle. Late diagnosis is seen in one third of patients with inguinal lymphatic ganglion metastasis and in 20% of those with pelvic ganglion metastasis.

PART C

In this part of the test, there are two texts about different aspects of healthcare. For questions 7-22, choose the answer (A, B, C or D) which you think fits best according to the text.

Text 1: Cancer and Cervical Cancer

The body is made up of trillions of living cells. Normal body cells grow, divide, and die in an orderly fashion. During the early years of a person's life, normal cells divide faster to allow the person to grow. After the person becomes an adult, most cells divide only to replace worn-out or dying cells or to repair injuries.

Cancer begins when cells in a part of the body start to grow out of control. There are many kinds of cancer, but they all start due to out-of-control growth of abnormal cells. Cells become cancer cells because of damage to DNA. DNA is in every cell and directs all its actions. In a normal cell, when DNA gets damaged the cell either repairs the damage or the cell dies. In cancer cells, the damaged DNA is not repaired, but the cell doesn't die like it should. Instead, this cell goes on making new cells that the body does not need. These new cells will all have the same damaged DNA as the first cell does.

No matter where cancer may spread, it is always named after the place where it started. For example, breast cancer that has spread to the liver is still called breast cancer, not liver cancer. Likewise, prostate cancer that has spread to the bone is metastatic prostate cancer, not bone cancer. Different types of cancer can behave very differently. For example, lung cancer and breast cancer are very different diseases. They grow at different rates and respond to different treatments. That is why people with cancer need the treatment that is aimed at their particular kind of cancer. Not all tumors are cancerous. Tumors that aren't cancer are called benign. Benign tumors can cause problems ± they can grow very large and press on healthy organs and tissues. But they cannot grow into (invade) other tissues. Because they can't invade, they also can't spread to other parts of the body (metastasize). These tumors are almost never life threatening.

The cervix is the lower part of the uterus (womb). It is sometimes called the uterine cervix. The body of the uterus (the upper part) is where a baby grows. The cervix connects the body of the uterus to the vagina (birth canal). The part of the cervix closest to the body of the uterus is called the endocervix. The part next to the vagina is the exocervix (or ectocervix). The 2 main types of cells covering the cervix are squamous cells (on the exocervix) and glandular cells (on the endocervix). The place where these 2 cell types meet is called the transformation zone. Most cervical cancers start in the transformation zone and in the cells lining the cervix. These cells do not suddenly change into cancer. Instead, the normal cells of the cervix first gradually develop pre-cancerous changes that turn into cancer. Doctors use several terms to describe these pre-cancerous changes, including cervical intraepithelial neoplasia (CIN), squamous intraepithelial lesion (SIL), and dysplasia. These changes can be detected by the Pap test and treated to prevent the development of cancer.

Cervical cancers and cervical pre-cancers are classified by how they look under a microscope. There are 2 main types of cervical cancers: squamous cell carcinoma and adenocarcinoma. About 80% to 90% of cervical cancers are squamous cell carcinomas. These cancers are from the squamous cells that cover the surface of the exocervix. Under the microscope, this type of cancer is made up of cells that are like squamous cells. Squamous cell carcinomas most commonly begin where the exocervix joins the endocervix.

Most of the other cervical cancers are adenocarcinomas. Cervical adenocarcinomas seem to have become more common in the past 20 to 30 years. Cervical adenocarcinoma develops from the mucus-producing gland cells of the endocervix. Less commonly, cervical cancers have features of both squamous cell carcinomas and adenocarcinomas. These are called adenosquamous carcinomas or mixed carcinomas. Although cervical cancers start from cells with pre-cancerous changes (pre-cancers), only some of the women with pre-cancers of the cervix will develop cancer. The change from cervical pre-cancer to cervical cancer usually takes several years, but it can happen in less than a year. For most women, pre-cancerous cells will go away without any treatment. Still, in some women pre-

cancers turn into true (invasive) cancers. Treating all pre-cancers can prevent almost all true cancers.

Text 1: Questions 7-14

7 When a person becomes an adult, the cells divide only to;

- A Replace old cells
- B Replace dying cells
- C Repair injuries
- D All of the above

8 The DNA in cancer cells is;

- A Damaged, but can be repaired.
- B Not totally damaged.
- C Permanently damaged, but the cell doesn't die.
- D Damaged but creates new cells with damaged DNA.

9 Cancer in liver having its origin in breast is a;

- A Liver cancer
- B Breast cancer
- C Prostate cancer
- D Bone cancer

10 Benign tumors;

- A Can grow and invade the tissues.
- B Can grow and press on healthy organs and tissues.
- C Are cancerous.
- D Are highly fatal.

11 Most cervical cancers start in;

- A Squamous cells;
- B Glandular cells;
- C The transformation zone;
- D All the above;

12 There are..... main types of cervical cancers

- A two
- B three
- C four
- D five

13 About 80 to 90% of cervical cancers are;

- A Adenocarcinoma
- B Adenosquamous carcinomas
- C Mixed carcinomas
- D Squamous cell carcinomas

14 Pre-cancerous cells in women can go away;

A With growth in more number of new cells.

B With medications from doctors.

C Without treatment

D Can't say

Text 2: Hepatitis - Viral Liver Infection

Hepatitis (A, B, or C) can be caused by a virus (Viral Hepatitis), drugs, alcohol, medications, and blood transfusions. Scientists estimate that between 3.5 and 5.3 million people in the USA are living with Hepatitis. A blood test is required to diagnose Hepatitis infection. Hepatitis A is a viral liver infection. In most cases the body easily defeats the virus (much like the flu, which is what you may feel like you have). Because of this it does not lead to long term liver challenges. Hepatitis A is the most common form of Hepatitis. It is spread through the feces of a contaminated person. This can easily be prevented by thoroughly washing hands after using the restroom, before eating, and after changing a diaper.

Eating raw oysters and undercooked clams can increase your chances of contracting the virus. If you are traveling in a country where Hepatitis is common make sure you wash your hands often and well, eat cooked oysters and clams, and use an antiviral essential oil such as Lemon to help protect yourself. Hepatitis B is a viral liver infection. Again, most adult bodies are able to fight off the virus. In this case, it is referred to as Acute (something that does not last long) Hepatitis B. Hepatitis B is spread through contact with blood or bodily fluids of an infected person. This can include unprotected sexual intercourse, sharing drug needles, getting a tattoo with instruments that were not properly cleaned, or by sharing a personal item such as a razor or toothbrush with an infected person.

A mother who is infected can pass the virus on to her baby during delivery. Again, the symptoms are flu-like in nature, so it often goes undiagnosed. A person who has Chronic (lasting three months or more) Hepatitis B may show no symptoms until liver damage has occurred. Hepatitis B can lead to liver damage or cancer;

your doctor may want to do a biopsy to determine the amount of damage your liver has experienced. Hepatitis C is also a viral liver infection. A few people will contract Hepatitis C and get better. This is called Acute Hepatitis C. Most, however, will develop Chronic Hepatitis C and go on to deal with liver damage, cirrhosis of the liver, liver cancer, and possibly liver failure. Hepatitis C is the number one reason for liver transplants in the USA.

Hepatitis C is spread through contact with contaminated blood. This can occur by sharing a needle, receiving a blood transfusion or organ transplant (blood and organs have been screened for Hepatitis in the USA since 1992), getting a tattoo with equipment that has not been properly cleaned, and, in rare cases, a mother can pass the virus on to her baby during birth. Scientists are not sure, but think there may be a slim possibility that the virus may be passed through unprotected sexual intercourse.

Symptoms generally do not occur until the virus is causing damage. Again, the symptoms are flu-like; you may also experience jaundice (yellowish eyes and skin) after the flu-like symptoms go away. Most people discover they are infected by having routine tests done or by donating blood or organs and the standard tests show the infection. There is also a home test you can purchase and do if you suspect you are infected.

If you are infected with a Hepatitis virus, or if you have been in the past, one of the most important things that you can do is strengthen your liver. The easiest way to do this is the Be Young Liver Cleanse: in the morning, take 1 drop of Be Young Lemon essential oil, 1 drop of Be Young Peppermint essential oil, and 1 teaspoon to 1 tablespoon of fresh lemon juice, followed by a glass of water. “Be Young essential oils” are absolutely 100% pure, EOBBB tested and guaranteed to be free of synthetics and extenders. Do not try this with an essential oil that you are not certain has been properly cared for and tested as you do not want to increase challenges to your liver. When properly supported, the liver has a remarkable capacity for regeneration.

Text 2: Questions 15-22

15 Hepatitis is caused by;

- A Virus
- B Alcohol consumption
- C Medications
- D All of the above

16 Which of the following spreads through feces of a contaminated person;

- A Hepatitis A
- B Hepatitis B
- C Both
- D Can't say

17 Most adult bodies are able to fight off this virus;

- A Hepatitis A virus
- B Hepatitis B virus
- C Both
- D Can't say

18 Hepatitis can lead to;

- A Cancer
- B Severe damage to the liver cells.
- C Cancerous growth in the liver.
- D Not given

19 In the USA people go for liver transplantation due to;

- A Hepatitis A
- B Hepatitis B
- C Hepatitis C
- D All of the above

20 Hepatitis C spreads through;

- A Sharing needles
- B Blood transfusion
- C Organ transplantation
- D All of the above

21 A patient may experience jaundice when;

- A The flu-like symptoms appear.
- B The flu-like symptoms disappear.
- C Eyes become yellow.
- D All of the above.

22 "Young essential oils" are;

- A Free from extenders
- B EOBBDD
- C Full of synthetics
- D Not given