

平成22年度

愛媛大学医学部一般入試（前期日程）試験問題

外国語（医学科）

（14:00～16:00）

注意事項

- （1）試験開始の合図があるまでは、次の頁を開いてはいけません。
- （2）解答は、解答用紙の指定のところに横書きすること。
- （3）受験番号は、解答用紙1枚ごとに、欄内に算用数字で横書きすること。
- （4）問題冊子は、表紙を含めて7枚、解答用紙は3枚あります。

問題 I . 救急救命法に関する以下の文章を読んで、後の設問に答えなさい。なお、「*」印のついた単語については本文の後に語注がついているので参考にしなさい。

Most accidents are minor and the necessary first aid is usually obvious to a person who has even the minimum of training. ①However, serious accidents require that the most *lethal injuries be treated first. Quick action is necessary for injuries such as severe *bleeding, interference with breathing where artificial respiration could help, or heart *arrest. *Poisoning, where any delay could endanger life, also requires prompt treatment. ②If there is a person available who can do so, that person should get a *physician as quickly as possible.

Severe bleeding or *suffocation can bring on death in minutes. In either case, *protracted bleeding or loss of oxygen could lead to irreversible brain damage even if the victim should survive.

Adequate training in first aid can be provided only by someone properly trained to do so. First aid certainly cannot be learned from five or six pages of a language text book.

Keep calm, and do not move the victim unless absolutely necessary. Suggested examination may be indicated by the nature of the accident, and by the victim's reactions and account. ③[] move the victim before first checking carefully that it will not further *aggravate injuries.

Thoroughly examine for all possible problems; inspection is often incomplete after the first injury is found, especially if it is a major injury. Give first aid to minor as well as ④[] injuries. This might be simplified by considering the nature of the accident. Poisoning reduces the possibility of fracture, *laceration, or violent injury unless the victim has fallen. At other times you must recognize that any part of the body might be injured and require attention as in the case of violent accidents, traffic accidents, falls, gunshot wounds, or *blows.

Surface injuries are readily evident. Fractures and internal *organ injuries present greater difficulties. Visible evidence of fractures may be absent, and such evidence is almost always absent for internal injuries. Your objective in a checkup is simple: determine what body parts are, or might possibly be injured. ⑤Obtaining this objective, however, may not be so simple since first aid should be administered, as much as possible, without moving the victim.

Keep the patient lying down with the head level. Look for excessive bleeding, arrest of breathing, heart activity and *signs of poisoning in that order. After treating ⑥the lethal problems you should consider each body part: the head, neck, back, *trunk, and each *extremity. For each part, look for surface injury, fractures, and internal organ injury. Also, note the victim's general condition and state of consciousness. Avoid the error of *splinting only the large bone and then ignoring a small fracture.

In case of shock, place *insulation under the victim as well as on top. The only treatment that

a *layman can administer to reduce the consequences of serious shock is to keep the victim warm, but avoid overheating.

Do not give *fluids to an unconscious or partly conscious person; they may interfere with breathing. Do not attempt to arouse an unconscious person by shaking, talking, or shouting. If the victim is unconscious, loosen clothing about the neck. If there is positively no possibility of fracture, turn the patient on the side. Maintain this position by *flexing a leg, and place a pillow or pad under the head so that *secretion can *drool from the corner of the mouth. This will usually allow good respiration.

Following injury, do not lift a *gaspng person in a way which will bend the body. This is done very often and may aggravate injuries of the back or internal organs. Gaspng is not always caused by insufficient oxygen but may be due to injury of the back or chest.

If breathing has stopped for one minute or less before artificial respiration is started, the chance for recovery are 98 in 100. They are 1 in 100 if breathing has stopped ten minutes. Artificial respiration may be needed for three to four hours before recovery becomes apparent after severe electrical shock. In case of *drowning, signs of recovery may not appear before 25 minutes.

出典：Albert Simpson 著 坪井光雄 編注「English for Health Sciences」南江堂 1983 年
(一部改変)

注)

lethal	致命的な	bleeding	出血
arrest	停止	poisoning	中毒
physician	医師	suffocation	窒息
protracted	長引いた	aggravate	悪化させる
laceration	裂傷	blows	打撃
organ	内臓	signs	徴候
trunk	体幹	extremity	四肢
splinting	副木を当てること	insulation	毛布など
layman	素人	fluids	飲料
flexing	屈曲	secretion	分泌物(ここではよだれ)
drool	垂れる	gaspng	あえいでいる
drowning	溺水		

- [設問 1] 下線①の文を和訳し、具体的にはどのような状況が考えられるか日本語を補って、句読点も含めて80字以内で説明しなさい。
- [設問 2] 下線②の文を句読点も含めて40字以内で和訳しなさい。
- [設問 3] 事故の被害者が生存しても不可逆な脳の障害が起こりうるのはどのようなケースだと筆者は言っているか、日本語で句読点も含めて20字以内で答えなさい。
- [設問 4] 救急救命法はどのようにして身につけるのが良いと筆者は言っているか、日本語で句読点も含めて30字以内で答えなさい。
- [設問 5] 空欄③に入れるべき、適切な英語の一語を答えなさい。
- [設問 6] 空欄④に入れるべき、適切な英語の一語を答えなさい。
- [設問 7] 下線⑤の文を句読点も含めて60字以内で和訳しなさい。
- [設問 8] 下線⑥とは具体的にどのようなことか、文意に沿って日本語で句読点も含めて30字以内で答えなさい。
- [設問 9] 意識のない患者に水分を与えては行けないのはなぜか、文意に沿って日本語で句読点も含めて20字以内で答えなさい。
- [設問 10] 患者の生存の見込みが98%から1%に低下するのはどのような状況の違いによるのか、文意に沿って日本語で句読点も含めて20字以内で答えなさい。

問題Ⅱ．英国での脳卒中診療の現状と課題について書かれた以下の文章を読んで、後の設問に答えなさい。なお、「*」印のついた単語については本文の後に語注がついているので参考にしなさい。

Disturbing failures and inequalities in *stroke care services in the UK were revealed in a report published on April 23 by the Clinical Effectiveness and Evaluation Unit of the Royal College of Physicians, London. The National Sentinel Stroke Audit, which examined data from 11 369 patients with stroke *admitted between April 1 and June 30, 2008, to 216 hospitals in England, Wales, and Northern Ireland, found that as many as a quarter of patients had no access to the best available treatment—admission to a dedicated *comprehensive stroke unit.

In practice, no stroke unit care means that almost ①() patients with a stroke in this sample had less chance of receiving known key indicators of good stroke management (90% of stay in a stroke unit, rapid screening for *swallowing difficulties, a brain scan within 24 h, *aspirin, assessment by a *physiotherapist and an *occupational therapist, being weighed, mood assessment, and rehabilitation goals agreed by a *multidisciplinary team). Rapid initial assessment, caring for patients in the acute stages of stroke, *thrombolysis if appropriate, rehabilitation with the aid of a multidisciplinary team of therapists, and supported *discharge are key to aiding recovery. But only 17% of the total sample was admitted to an acute stroke unit within 4 h of hospital admission. As few as 21% had a brain scan within 3 h. And although an estimated 15% of patients were *eligible for thrombolysis, only 1% received it.

②These are ③shocking findings. Stroke services in England, Wales, and Northern Ireland are offering not only unequal care, but also care that falls below the standards set out in the National Stroke Strategy. The strategy, which was introduced in 2007, has helped to stimulate efforts to improve services. Encouragingly, since the last Sentinel Stroke Audit in 2006, there have been some improvements in care. In 2006, for example, only 62% were admitted to a stroke unit, and 16% had a brain scan within 3 h. But clearly there is a long way to go before all patients with suspected stroke receive *prompt access to a high-quality stroke unit with a multidisciplinary team of therapists, rapid imaging, and thrombolysis when appropriate—the ideal standards set out in the National Stroke Strategy.

Stroke services in the UK suffer from inadequate staff numbers. One survey published last month in *Clinical Medicine* estimated that more than 2000 extra full-time nurses, physiotherapists, occupational therapists, and speech therapists are needed to provide an optimum service in England alone.

But it is not just a question of resources, although stroke must be given higher priority in resource *allocation to ensure that patients receive the highest standards of care possible.

Increasing public awareness of the symptoms and signs of stroke and *transient ischaemic attack is crucial. “Time is brain” and “brain attack” are slogans that have worked well in the USA to symbolise the importance of thrombolysis and rapid treatment, *analogous to those well established in *cardiology. In the build up to May 12, ④Stroke Awareness Day, a series of television advertisements in the UK, which *portray people with signs of a stroke or transient ischaemic attack, may help to develop the sense of urgency that needs to be triggered with stroke, as it is with heart attack.

Increased use of ⑤FAST (one or more of facial weakness, arm and leg weakness, speech problems, then time to call an emergency ambulance) to diagnose stroke and therefore take patients directly to an acute stroke unit would enable rapid admission to the appropriate place. At present, many in the UK end up in general admissions units in hospitals where access to scanning, thrombolysis, and care by appropriate therapists is delayed. Increasing the priority with which ambulances respond to calls for suspected stroke would also help.

Stroke is a medical emergency. Despite almost two decades of research that has proven the benefits of stroke units, thrombolysis, and aspirin in reducing *mortality and *disability, ⑥stroke still lies in the shadow of its big sister, heart attack. Stroke physicians rarely have the status or power of *cardiologists. The proportion of research funds for stroke is *paltry in comparison with that for *myocardial infarction. Yet stroke-related disability is expected to substantially increase as populations age. In view of the worldwide shortage of health-care professionals and other resources to *implement the strategies that work for stroke care, never has “time is brain” seemed more appropriate.

出典：Lancet, 2009

注)

stroke 脳卒中

comprehensive 包括的な

aspirin アスピリン (脳梗塞治療薬)

occupational therapist 作業療法士

thrombolysis 血栓溶解療法 (発症後
3時間以内の脳梗塞に適応がある)

eligible 適応のある

allocation 割当

analogous 類似した

admitted 入院した

swallowing difficulties 嚥下困難

physiotherapist 理学療法士

a multidisciplinary team 多面的な訓練チーム

discharge 退院

prompt 迅速な

transient ischaemic attack 一過性脳虚血発作
(出現した神経症状が短時間のうちに回復する脳卒中の一型)

cardiology 心臓病学

portray 描写する
disability 神経障害の後遺症
paltry わずかな
implement 履行する

mortality 死亡率
cardiologists 心臓病学者や心臓病治療医
myocardial infarction 心筋梗塞

[設問 1] 空欄①の中には、どれが正しいかを選び、○で囲みなさい。

1) 1000 2) 3000 3) 5000 4) 7000 5) 10000

[設問 2] 下線②の指す内容を本文より抜き出し、その最初と最後の 2 語ずつを答えなさい。

[設問 3] 下線③の指す「shocking」である内容を解決するための課題として筆者は何を指摘しているか。それぞれ日本語 20 字以内で 3 つ答えなさい。

[設問 4] 下線④の「Stroke Awareness Day」の意義を句読点を含めて日本語 50 字以内で説明しなさい。

[設問 5] 下線⑤の「FAST」の意義について句読点を含めて日本語 50 字以内で説明しなさい。

[設問 6] 下線⑥の指す内容を、句読点を含めて日本語 50 字以内で具体的に説明しなさい。

[設問 7] 文中にある「Time is brain」について句読点を含めて日本語 50 字以内で説明しなさい。