

帝京平成大学大学院

薬学研究科（博士課程）

2026 年度入学試験問題用紙（英語）

受験番号							氏名	
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【問題】

注釈を参考にして、以下の英文を和訳せよ。和訳に際しては、※にて示した注意点を除き、英単語の発音をカタカナで表記すること（いわゆるカタカナ英語）を避け、内容を正確に日本語で表現することを求める。

※ 注釈にある語彙は、英単語の発音をカタカナ表記して表現しても構わない。

※ 生物の学名（本文中の下線のある語句）、数字、記号、および注釈にないアルファベットの略語は、カタカナ表記や漢字にせず本文中の表記のまま記載すること。

N. fowleri is the only species of Naegleria reported to cause primary amoebic meningoencephalitis (PAM) in humans. It can survive in temperatures up to 46 °C and is known to be sensitive to standard chlorine levels and salinity in water. Infection occurs when contaminated water (from lakes, tap water, etc.) enters the nasal cavity.

PAM is a rapid and severe central nervous system infection that leads to neuronal destruction and cerebral edema, with most patients dying within 3–7 days of symptom onset. The fatality rate for PAM is 98 %.

The clinical symptoms of PAM are often mistaken for bacterial or viral meningitis, leading to misdiagnosis and delayed treatment. PAM was initially linked to recreational activities in contaminated warm freshwater, but many cases have been reported in individuals, particularly within the Muslim community, who had not engaged in such activities but performed nasal ablutions with contaminated water. Typically, Muslims pray five times a day, and before every prayer, they perform ablution, which involves washing the hands, mouth, nostrils, face, arms and feet as well as wiping the ears and head.

The first documented PAM case occurred in Florida, USA, in 1962, and since then, numerous cases have been reported worldwide. In Pakistan, the first case was reported in Karachi in 2008. Pakistan is the second most affected country globally, with 99 % of the cases occurring in Karachi. Pakistan ranks among the top 10 countries with the largest population lacking access to safe water. Karachi, a densely populated city with a predominantly Muslim population, faces significant challenges with access to clean water and environmental pollution. Due to poor sanitation infrastructure and inadequate pre-water treatment, various pathogens are known to be present in the domestic water supply.

Karachi has an arid climate, characterized by long, hot summers from March to October. Rising

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【問題の続き】

temperatures due to climate change and a failing municipal water supply system, may be key factors contributing to the increasing incidence of PAM. Since 2008, the city has consistently recorded fatalities linked to PAM, with hundreds of deaths occurring over the last 15 years, particularly in Karachi. The water supply infrastructure of this city appears to be a main contributing factor.

（出典：Aurongzeb M. et al., BMC Med Genomics. 2025, 18:6. [doi: 10.1186/s12920-024-02068-2] より、一部改変）

注釈（アルファベット順）

ablution(s) 「沐浴（宗教的な洗浄）」

amoebic 「アメーバ性の」

arid 「乾燥した」

edema 「浮腫」

～ etc. 「～など」

fatality rate 「致死率」

Florida 「フロリダ（アメリカ合衆国の都市名）」

Karachi 「カラチ（パキスタンの都市名）」

meningitis 「髄膜炎」

meningoencephalitis 「髄膜脳炎」

municipal 「地方自治体の」

Muslim(s) 「イスラム教徒」

Pakistan 「パキスタン（国名）」

pathogen 「病原体」

salinity 「塩分濃度」

sanitation 「衛生（特に上下水道などの公衆衛生）」

USA 「アメリカ合衆国（国名）」

viral 「ウイルス性の」