A Big Earth Data Platform for Three Poles

**Mitochondrial genome data of ancient DNA from hanging coffins in East Asia**

1、Description

The complete mitochondrial DNA sequences of 41 human remains from 13 hanging coffin sites 2500-660 years ago in Weixin and Yanjin, Zhaotong, Yunnan, Huacun, Baise, Guangxi and bangmapa, Thailand were analyzed by using the ancient DNA analysis technique. They found that the maternal genetic diversity of the hanging coffin people in Northwest Yunnan was very high, while the genetic diversity of the hanging coffin people in northern Thailand was relatively low. This result is consistent with the view that the hanging coffin burial custom originated in southern China and spread southward to Southeast Asia. In addition, a small number of matrilineal lineages were shared among the hanging coffin people in different regions of Asia, indicating that there is a very close relationship between different hanging coffin people. Combining the results of genetic analysis with the evidences of archaeology, physical anthropology, folklore and history, they speculated that the hanging coffin burial custom originated in the Baiyue ethnic group in the southeast coastal areas of China (such as Wuyishan area) about 3600 years ago, and they are the ancestors of the Dai ethnic group with many ethnic groups. After that, the custom of hanging coffin was widely spread in South China by means of people migration and flow. However, about 2000 years ago (the earliest time of hanging coffin burial in Thailand), a very small number of inheritors of hanging coffin burial spread the custom to some aboriginal groups in Southeast Asia, such as northern Thailand, by means of cultural diffusion.
This study only makes a preliminary discussion from the perspective of maternal genetic lineage. For the hanging coffin culture which has spread for more than 3000 years in South China, Southeast Asia and the vast area of the Pacific Islands, the origin and development of its culture and the history of its inheritors may be more complex. In the future, more representative samples of human remains buried in a hanging coffin will be used, from the perspective of genomic DNA and paternal Y-DNA, combined with interdisciplinary research, which will provide more systematic evidence support for a more comprehensive display of the historical and cultural features of the hanging coffin burial custom.

2、Keywords

Theme：Hanging-coffin,Genetic diversity,Population,Sites
Discipline：Human-nature Relationship
Places：China
Time：since 3000 years ago

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.3MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：0.0 | - |
| west：0.0 | - | east：0.0 |
| - | south：0.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

QI Xuebin. Mitochondrial genome data of ancient DNA from hanging coffins in East Asia. A Big Earth Data Platform for Three Poles, doi:10.11888/Ecolo.tpdc.2711992021

References to articles:

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

8、Data resource provider

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