

The origin of the mysterious multi-country monkeypox outbreak in non-endemic countries

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Abstract

Logical deductions from experimental data have been unable to explain the origin of the current monkeypox outbreaks in multiple countries. But upon illustrating the reality in which these outbreaks occur, it was found to be that in which different diseases of the same immunological nature, the nature that permits them to be rendered asymptomatic simultaneously without the elimination of their different causes, appear simultaneously when conditions that permitted immune mechanisms to bring about such protection disappear. An outbreak of such immunologically equivalent diseases therefore does not require the spread of those that are pathogens among the causes of such diseases to occur. And the manifestations of such diseases will become widespread in a population when factors that cause the disappearance of conditions that permitted them to be rendered asymptomatic by immune mechanisms become widespread in the population. If we will escape the threat that the catastrophically widespread appearance of manifestations such as Ebola and malignancies will pose to our species, our topmost research priority ought to be the immunological nature of the pathological effects of the pathogens that are linked with them.

Keywords: public health; diseases; infectious diseases; infection; malignancies; ebola; DFTD; pathogen; virus

Introduction

It has remained unknown why monkeypox cases with no established travel links to Africa have emerged in multiple countries¹ with the number of cases detected outside the continent in one week alone surpassing the total number detected since the virus was first found to cause disease in humans in 1970² and why there is no obvious link between many of the clusters.³ Given the fact that if cases of the much deadlier Ebola should emerge in multiple countries in the same manner, the consequences may be grave for humankind, it is important that the origin of these mysterious monkeypox outbreaks becomes understood.

Methods

Albert Einstein's theory of gravity, which predicts planetary motions that match what astronomers know through their sense experiences to be true, was not invented with the popular method that makes logical deductions from data obtained through such experiences such as that with which Sir Isaac Newton obtained his theory of gravity but rather with a method that illustrates the reality in which the things we know through such experiences occur or exist and

makes logical deductions only for the purpose of deriving consequences which must match such empirical knowledge if what has been illustrated is indeed reality.⁴ It is therefore this method of obtaining knowledge about reality, that knowledge which begins with experience and terminates in it,⁴ that we ought to employ in our investigation of the origin of the mysterious multi-country monkeypox outbreak in non-endemic countries.

Results

The following are the results of the illustrated reality in which the mechanisms of immunity render diseases asymptomatic to ensure the survival of the organism despite the presence of their causes which permitted us to explain different immunological phenomena which include those observed during the COVID-19 pandemic in a recent paper⁵ and to explain the origin of the mysterious multi-country monkeypox outbreak in non-endemic countries in this paper.

1. Pathological manifestations that are linked to a particular pathogen do not require the spread of the pathogen to appear in organisms

Theories which were invented with the popular method that makes logical deductions from experimental data have described the immunological nature of the pathological effects of pathogens, the nature that permits immune mechanisms to protect organisms from such pathological effects, has been considered to be that which requires pathogens to be perceived as

invaders, detected and eliminated. But the reality in which the mechanisms of immunity operate is that in which the nature of the pathological effects of pathogens which permits immune mechanisms to protect organisms of diverse kinds from them does not depend on a nature that is uniquely possessed by pathogens but rather on a nature which the effects of pathogens share with the effects of sterile causes so that immune mechanisms could neither detect nor destroy pathogens and therefore could not render such pathological effects asymptomatic by eliminating pathogens.

In this reality, the mechanisms that reduce pathogen load in animals are not the immune mechanisms which reduce disease severity and render them asymptomatic. Indeed, facts such as loads of SARS-CoV-2 in some cases of severe COVID-19 which are lower than those observed in some mild and asymptomatic cases⁶ which have led clinicians to the theoretical picture that severe disease is a consequence of hyperinflammation rather than effects of direct pathogen toxicity⁷ suggest that inflammatory mechanisms which reduce pathogen load complicate pathology instead of reducing disease severity.

Therefore, in reality, outbreaks of diseases which have been rendered asymptomatic do not require the spread of pathogens that are linked with the appearance of the manifestations of such diseases to occur but rather the disappearance of conditions that permitted immune mechanisms to render them asymptomatic without eliminating their causes.

Understanding whether there is a genetic basis for the unprecedented spread outside Africa of any virus that is linked with the appearance of monkeypox in Africa will therefore be impossible because such a spread has not occurred as the absence of travel links and unconnected clusters show. What the clusters have in common is exposure to the factors that caused the disappearance of the conditions that permitted immune mechanisms to render monkeypox asymptomatic without eliminating etiological factors of the same immunological nature in response to which monkeypox manifestations appear. The fact that many of the cases have been among men who have sex with men (MSM)³ is explained by similar exposure of the MSM groups to factors that cause the disappearance of such protective conditions rather than the mere spread of a particular pathogen.

2. A pathogen that is linked with the appearance of certain pathological manifestations in one case is not necessary for the appearance of the same manifestations in other cases.

The question to which we are led by the first result is “How could monkeypox be brought about outside Africa without the spread of viruses that are linked with it on the continent?” And the second result furnishes us with the answer. A pathogen that is linked with the appearance of monkeypox manifestations in one case is not necessary for the appearance of such manifestations in other cases.

In the reality in which immune mechanisms operate, the nature of the pathological effects of the pathogen which permit them to render the manifestations of such effects asymptomatic does not

depend on the nature of the pathogen but rather on a nature which its effects share with the effects of other causes which include sterile factors.

Therefore, the pathological manifestations that appear upon the disappearance of the conditions that permit immune mechanisms to render effects of the same immunological nature as those of a pathogen asymptomatic will be manifestations of the different diseases of different causes with pathological effects of the same immunological nature which are present at the time and these may not include the pathogen at all in some cases.

And it is because causes with effects of the same immunological nature that manifest simultaneously in monkeypox cases are already present in individuals in those countries that the current outbreaks have appeared without the spread of the viruses that are linked with such cases in Africa as the absence of travel links and unconnected clusters show.

We must therefore expect that causes with effects of the same immunological nature that manifest simultaneously in Ebola cases may already be present in individuals in countries outside Africa and investigate the conditions that permit immune mechanisms to render such diseases asymptomatic without eliminating their causes and the factors that cause the disappearance and reappearance of such protective conditions before such cases appear on different continents.

Such investigation requires the immunological nature of the effects of pathogens and not their genetic nature to be our topmost research priority.

3. The manifestations that are linked with a pathogen are as widespread in a population as the disappearance of the conditions that permit immune mechanisms to render the effects of different causes of the same immunological nature asymptomatic simultaneously rather than the transmissibility of the pathogen and such manifestations are as virulent as those that appear among the diseases in the immunological spectrum of the disease the pathogen causes rather than the virulence of the pathogen.

For 17 years, researchers have been struggling to characterize precisely which genes could explain why monkeypox is more widespread and virulent in outbreaks in Central Africa compared with outbreaks in West Africa³ on the basis of the assumption that the pathogens that are linked with Central African outbreaks is more transmissible and virulent in nature than the pathogens that are linked with the West African outbreaks.

In the reality which has been illustrated, however, monkeypox is more widespread in one population than another because the factors that cause the disappearance of the conditions that permit immune mechanisms to render the effects of different causes of the same immunological nature as the pathogens that are linked with such cases asymptomatic simultaneously are more widespread in such a population. And in this reality, the monkeypox manifestations that appear in one population are not more virulent than those that appear in others because the pathogen that

is linked with such manifestations in that population is more virulent than those that are linked with them in others but rather because those that appear in that population among the different diseases in the immunological spectrum to which the disease that the pathogen causes belong produce a clinical outcome that is more severe than the outcomes produced by those that appear in other populations among such immunologically equivalent diseases produce.

Such different outcomes of the pathological manifestations that are linked with a pathogen are brought about even in the same population and the different outcomes of plague which is linked to only one pathogen, *Yersnia pestis*, was first reported by the medieval French physician, Guy de Chauliac who described the one that was more widespread in his locality, the outcome “which involved spitting of blood” as so contagious that it could be caught from another person “not just when living nearby but simply by looking.”⁸ In reality, however this outcome that is known as pneumonic plague, one of the three major forms of plague,⁹ was more widespread in that locality because those that appeared in most people in that locality among the diseases in the immunological spectrum of the disease that *Yersnia pestis* causes are those that manifest with hemoptysis.

4. Manifestations that are linked with pathogens will appear catastrophically in a population even in the absence of such pathogens when factors that cause the disappearance of the conditions that permit immune mechanisms to render diseases asymptomatic that are immunologically equivalent to those caused by such pathogens become extremely widespread in the population within a short period of time

When we consider the fact that pathological manifestations that disappear when different diseases that share the same immunological nature with that which a pathogen causes are rendered asymptomatic include not only those that are traditionally considered infectious but also those such as malignancies,¹⁰ we are able to make a most important prediction. Such manifestations as malignancies which are only linked with pathogens because they are manifestations of diseases that are immunologically equivalent to diseases that pathogens cause must become catastrophically widespread in the absence of a pathogen to the spread of which such a widespread occurrence could be attributed when factors that cause the disappearance of conditions that permit immune mechanisms to render diseases of the same immunological nature asymptomatic disappear in a large proportion of the population within a short period of time.

The widespread occurrence of Devil Facial Tumor Disease which is threatening Tasmanian devils with extinction in the wild¹¹ matches this prediction perfectly. In the absence of knowledge of the reality in which it is brought about, the cancer was thought to be widespread in Tasmanian devils because it is a transmissible disease. But in the absence of links to a pathogen, it was impossible to justifiably explain the origin of such a transmissible cancer.

The reality that enables us to predict the occurrence of widespread pathological manifestations in the absence of pathogens, however, enables us to see that they did not become widespread in Tasmanian devils because they are manifestations of transmissible diseases but rather because the factors that cause the disappearance of conditions that permit immune mechanisms to render

them asymptomatic disappeared in a large proportion of Tasmanian devil populations within a short period of time.

And it points us in the direction of what must be our topmost research priority now if we will be able to prevent the catastrophic appearance of pathological manifestations that are linked with pathogens in our populations – the investigation of the immunological nature of different diseases which permits immune mechanisms to render them asymptomatic simultaneously and which permits them to appear simultaneously when their different causes are present at a time when the conditions that permit them to be rendered asymptomatic simultaneously disappear.

Discussion

The current outbreaks could not be explained by theories which were invented with the popular method that makes logical deductions from experimental data. But by illustrating reality and making logical deductions only for the purpose of obtaining consequences which must agree with our experiences if reality has indeed been illustrated, we have been able to account for the origin and epidemiology of these outbreaks.

Given that in this reality, how widespread monkeypox and other pathological manifestations are does not depend on the transmissibility of the pathogens with which they have been linked but rather on how widespread the factors that cause the disappearance of conditions that permit

immune mechanisms to render diseases that have the same immunological nature as the diseases that such pathogens cause are, this nature which pathogens share with other causes which may already be present in individuals in countries where such pathogens are not endemic ought to be the most important among our research priorities now.

The consequences may be grave for humankind if much deadlier manifestations such as Ebola and malignancies should emerge in multiple countries in the same manner as the current monkeypox outbreaks before we understand the immunological nature which the pathological effects of pathogens share with those of sterile causes, the nature which permits the widespread appearance of pathological manifestations even without the spread of pathogens that are linked with them.

Declaration of Competing Interest

I declare that there are no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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