Discussion on Biochemical Mechanism of Phenol in Treating Viral Diseases

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[Abstract] Ultra-low concentration of phenol (C6H5OH) solution may be a broad-spectrum drug for the treatment of viral diseases. Its mechanism is through the condensation and dehydration of the hydroxyl group on the phenol and the hydroxyl group in the 2 ', 3'-C position of the ribose, causing the RNA to stop lengthening, which in turn causes viral replications to stop.

Doctor Li Yuehua has published a paper titled "Acupuncture point injection trace phenol (C6H5OH) in clinical application" [1] and incorporated the technique to treat patients in his medical practices over the last decade. Based on these, we believe that the ultra-low concentration of phenol (C6H5OH) solution is an effective broad-spectrum anti-viral drug. At the early stage of the COVID-19 pandemic, Dr. Li also conducted ultra-low concentration phenol solution acupoint injection treatment for dozens of suspected or diagnosed patients who could not see a doctor in time in Wuhan, and he believed that the patients had all recovered. However, phenol as an injection has not undergone strict clinical verification and has not been approved by the CFDA, which caused widespread controversy on the Internet.

Doctor Li Yuehua ’s conclusion was verified through his limited medical practices. Although the number of observations is limited, it should be credible from the data records provided. Dr. Li once believed[2] that phenol can combat viruses because the six-membered ring structure of phenol is similar to the six-membered ring of base material pyrimidine, it may be that phenol competes for occupying the nucleobase positions, preventing viral RNA from continuing to replicate, thereby helping the body's immune proteins eliminate viruses. Relating to this basic cognition, during the treatment, he also advised that if the fever is not too high to tolerate, do not take antipyretics, because antipyretics are suppressing immune proteins to eliminate the virus.

But if phenol indeed replaces the base pair material, it may also cause a disorder of genetic information. That is, if phenol can compete for the position of the pyrimidine that occupies the base pair of viral RNA, then it will obviously behave the same in the normal DNA of the human body, causing unintended consequences.

In fact, Dr. Li has been using this method for more than ten years, and no genetic accidents have occurred. Phenol is also a commonly used antimicrobial component in medical injections [3,4]. It has been used safely for decades, and no genetic problems have been reported.

While Phenol has long been widely used as a standard disinfectant [5] and high-concentration phenol is well known to harm the human body, the effect and genetic influence of low-concentration phenol in the human body have not been reported. This article attempts to explore the possibility of phenol treatment of viral diseases from a biochemical perspective. Assuming that ultra-low concentration phenol solution is indeed a broad-spectrum drug for curing viral diseases, what is its biochemical mechanism?

1 Life chemicals and assembly of RNA

The most basic single molecules that make up life include: phosphoric acid, ribose and deoxyribose, basic substances (adenine A, guanine G, cytosine C, uracil U and thymine T). The substances constituting viral RNA are mainly phosphoric acid, ribose, adenine A, guanine G, cytosine C and uracil U, excluding thymine T. This article focuses on the assembly of viral RNA.

1.1 Ribose

The sugar in the ribonucleotide of viral RNA is ribose, and the basic structure is shown in Figure 1. The C positions from 1 ', 2', 3 ', and 5' of the ribose have hydroxyl groups, which are all active sites, and can react with new hydroxyl groups or hydrogen atoms to condense and release a water molecule.

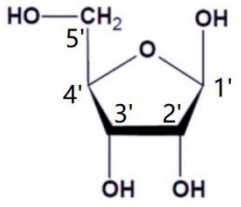

Figure 1. The chemical structure of ribose

1.2 Ribonucleotide unit

The H-ion of phosphoric acid is condensed with the hydroxyl-OH group on the 5'-C of ribose to form a C-O-P bond after dehydration

The biomass base (AGCU) and the 1'-C hydroxyl group of ribose are condensed and dehydrated to form a C-N bond.

The above reaction process forms a ribonucleic acid base unit, as shown in Figure 2.

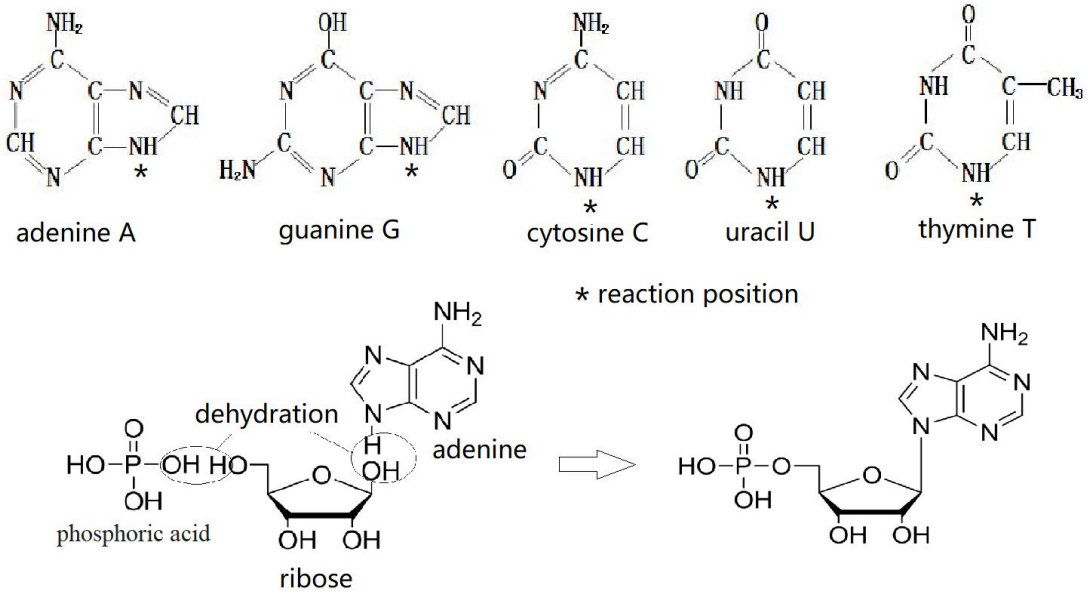

Figure 2. Dehydration to form ribonucleotide base unit

1.3 Concatenation of viral RNA

Figure 3 shows how viral RNA is concatenated. Ribonucleotides are repeatedly concatenated through a phosphate backbone to form an RNA chain. The 3'-C hydroxyl group of the ribose in the previous ribonucleic acid base unit is condensed with the -OH of the phosphoric acid in the next ribonucleic acid base unit to release a water molecule, forming a C-O-P bond, thus forming a strong binding force

3'C-O-P-O -5'C-4'C-3'C-O-P-O-5'C-4'C-3'C-O-P-O-5'C-4'C-3'C-O-P-O-5'C-4'C-3'C cycle repeating chain skeleton.

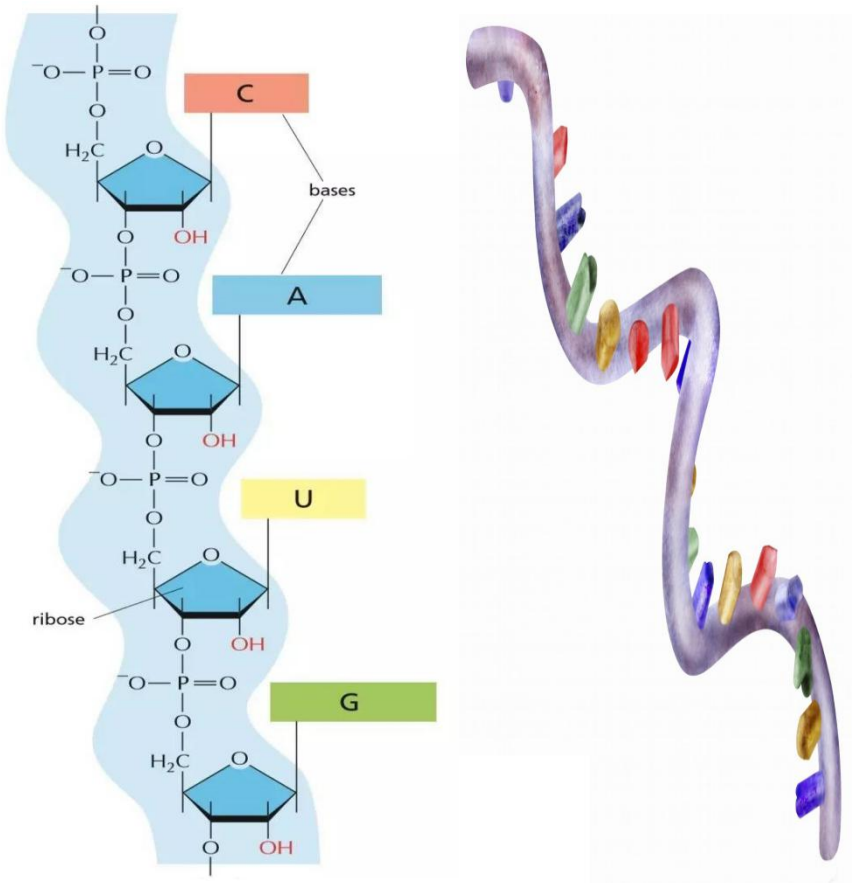

Figure 3. Concatenation of viral RNA

2 Occupation of phenol in RNA and termination of RNA replication

2.1 Occupation of phenol in RNA

After the low concentration and low dose of phenol enters the human body, it will not cause damage to biological cells due to its low concentration. And since the molecular size of phenol is very small, it is easy to penetrate and diffuse between human cells, and further participate in biomass reactions. Observe the structure of the RNA chain. The free ribose of RNA has a hydroxyl group at the position of 2'-C and 3'-C. When phenol intervenes, phenol is likely to immediately condense with the hydroxyl groups at the 2'-C and 3'-C positions in the base unit of the ribonucleic acid to release water molecules, forming a 1'COC (2'3 'carbon) bond of the benzene ring Structure, as shown in Figure 4.

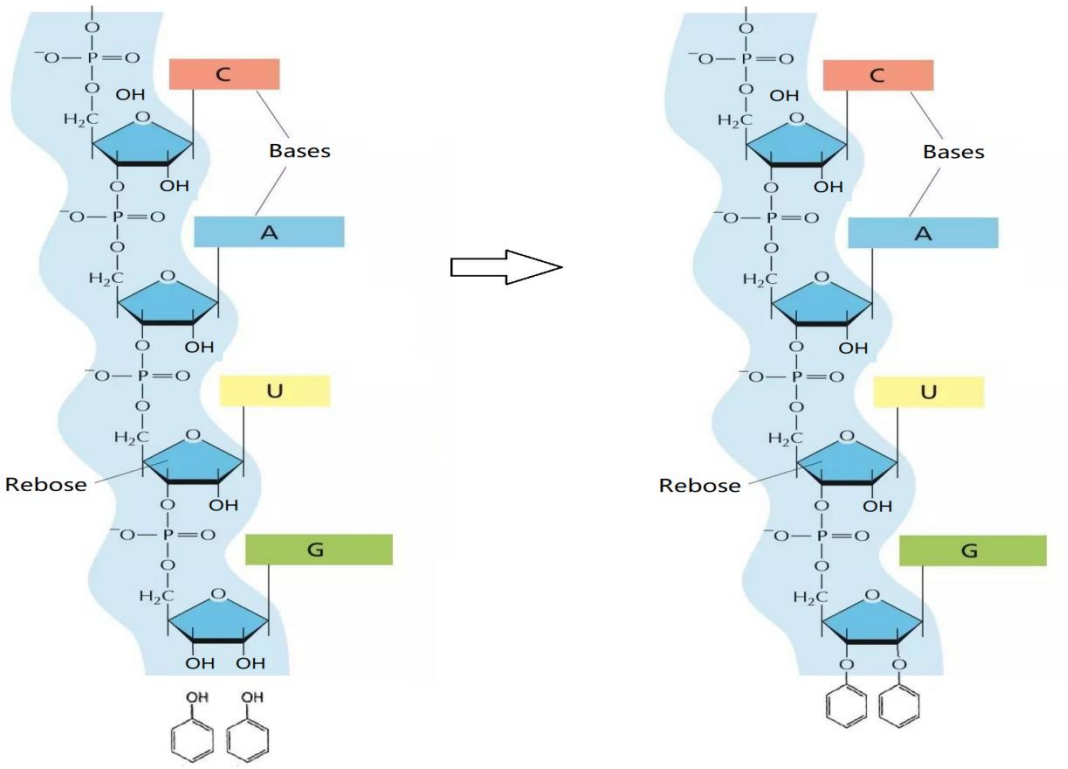

Figure 4. Occupation of phenol in RNA

2.2 Phenol terminates RNA virus replication and supports immune proteins

Once phenol has completed the above-mentioned condensation reaction in Figure 4, the RNA strand cannot continue to grow, because phosphoric acid cannot react with the hydrogen on the 2 ', 3', 4 ', 5'-C of the benzene ring, which means the stop of RNA replication, and the stop of virus replication

The cessation of virus replication means that the virus has no reinforcements. Under the continuous attack of immune proteins, the existing virus will gradually be completely eliminated.

Doctor Li Yuehua believes that phenol stops the virus from replication, thereby supporting the attack of immune proteins, and he suggests that as long as the fever can be tolerated, patients should not take antipyretic drugs, in order to allow immune proteins to eliminate the stock virus as soon as possible. Taking antipyretics may take longer time to heal.

2.3 The effect of phenol on DNA

The effect of phenol on DNA should be the same as that of RNA, except that the sugar in DNA is deoxyribose. Phenol can only condense with the hydroxyl group on the 3'-C of deoxyribose in the base unit of deoxyribonucleic acid to release a water molecule, thereby causing the termination of DNA replication. Therefore, during the period of using phenol, some DNA may stop replicating, but because the medication is not continuous, the DNA replication will not change after a period of metabolism

3 Discussion on the usage of phenol solution

Doctor Li Yuehua emphasized that there are three basic principles for using phenol: 1. It must be at a very low concentration, and the recommended concentration is 0.075%. 2. It must be injected subcutaneously. 3. The total amount must be controlled, 1 to 2 times a day up to one week, with each injection not exceeding 2ml.

Since most people have difficulty in performing the injection operation, the same amount solution may be taken orally to achieve the same purpose. The phenol solution can be mixed with water and the human body can absorb. However, because phenol has to pass through the digestive system, it may undergo chemical reactions during the digestion process, and the hydroxyl group will be lost to lose its function.

4 Discussion on the function of some phenol-containing substances

Public information shows that Remdesivir is effective in the treatment of COVID19. Observing its molecular structure, it can be found that a phenol is obviously hanging in the lower right corner.

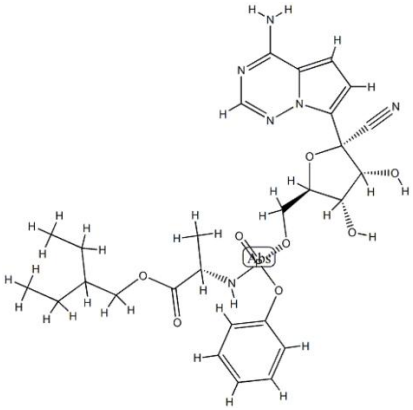

Figure 5. Remdesivir

Resveratrol is called a broad-spectrum anticancer and antiviral drug[6]. Observing its molecular structure is a combination of one phenol and another resorcinol.

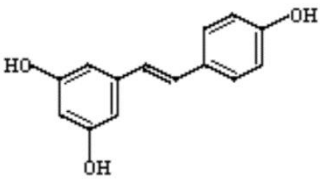

Figure 6. Resveratrol

Perhaps phenol (C6H5OH) is the simplest molecular structure and the smallest molecular size of these phenolic substances, which can easily pass through human cells. As a result, it can better play a role in preventing RNA replication.

5 Conclusion

Ultra-low concentration phenol solution may be a broad-spectrum drug for the treatment of viral diseases and should be further studied. The mechanism by which phenol treats viral diseases may be the condensation of phenol and free hydroxyl groups on the ribose of viral RNA. As a result, the RNA chain cannot continue to be extended, which prevents the replication of RNA viruses. The number of viruses no longer increases, which directly supports the removal of viruses by human immune proteins. Substances containing hydroxyphenol structure may inhibit viral replication.

Maybe Ultra-low concentration of phenol solution will stop the COVID-19 pandemic and save the world.

References

[1] Li yuehua, Seek Medical and Ask the Medicine, 2013, 02, P51
[2] Li yuehua, Hypothesis Phenol can combat virus, Li Yuehua's wechat public account
[3] https://wenku.baidu.com/view/a9d82ffd770bf78a64295407.html (Insulin injection instructions-Baidu Encyclopedia)
[4] https://ispeak.vibaike.com/514（Growth Hormones - Micro Encyclopedias）
[5] https://baike.baidu.com/item/%E8%8B%AF%E9%85%9A/317273?fr=aladdin (Phenol-Baidu Encyclopedia）
[6] Gao haiqing etc., Resveratrol basic and clinical, Beijing: People's Medical Publishing House. 2019

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