energetically more advantageous position and interact between each other by hydrophobic chains that leeds to formation of complexes with minimal free energy). This conception is based on the suggestion that molecules of polyene antibiotics in aqua solutions may be exist in associated forms. The includes to membrane in this form. Inclusion of molecular complex into membrane takes part in the conformation changes to the side of membrane plane.

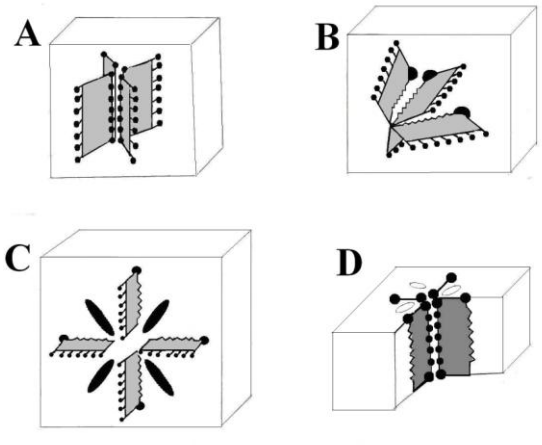

Figure 4: Hypothetic molecular model of levorin channel formation (9,10).

Hydrophilic chains of antibiotics turn to the water phase but hydrophobic chains include to molecular complex on the fig.(4). This molecular complex diffuses to membrane and gradually reverse to reach energetically advantageous position. Associated structures of antibiotics in the lipid phase are thermodynamically in stabile position turn inside out. Hydrophobic "tails" of molecules create contact with lipid part of membrane. Molecules of antibiotics by hydrophobic side interact with sterol component and localize parallel membrane plane surface. Then this complex is turned inside to be out and forms ionic channel again in membrane. There are hydrophilic chains of antibiotics molecules in the channel. Thus there are formations of conducting levorin structures in lipid bilayer.

2. Conclusion

The detail study of levorin as another polyene antibiotics may possible to receive more advanced drugs for effective usage in practical medicine. There are results of biological action, conductivity and selectivity and RBC ultrasonic haemolysis of levorin and its derivatives represented in this review. So there is correlation in the action of researched antibiotics on cell and model bilayer membranes. It is suggested that changes of mechanical firmness of RBC under the influence of PA probably connected with microviscosity violation of protein-lipid system by formation of structural molecular sizes ionic channels.

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