

UCICATRIZE: Practical Self-Healing Injection Kit for Allergic Reactions

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In this study, I have designed a wearable device to be used for the injection of the medical agents such as adrenalin, avil and prednol etc. during first-aid interventions in case of anaphylaxis shock. The device has been designed as a bracelet in which an ampoule/injection-syringe is embedded. The people with the risk of anaphylaxis should carry the cards with the information about their allergy thereon; if necessary they could be placed inside of bracelets, necklaces and wrist-band. After insect bites, food-poisoning and drug-poisoning, it could develop with the symptoms of skin rashes, itches, swollen throat and low-blood pressure. Generally, it is very hard to ward off anaphylaxis episodes, but it is possible to mitigate the incidence and severity of the shocks, applying preventive measurements. For this purpose I have designed an easy-to carry trendy bracelet, called UCICATRIZE, for the people- under the risk of anaphylaxis episodes. It is, on one hand, light, chic and practical for daily life and, on the other, offers effective solution for the problem with syringe and drug embedded therein. In the study I designed the prototypes of the injection syringe beforehand. To execute its 3D printing, I wrote its coding and then I got printed its 3D model of bracelet and ampoule/injection syringe. After conducting the first tests of the prototype, I produced the model. If I get my design mass-produced, the patients suffering from anaphylaxis disorder will have a bracelet in which drug/syringe set is embedded and which they can use this set on their own whenever needed-in office, sleep, shower; in other words, in any moment and in any place.