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Reminder system for adrenaline autoinjectors does not work

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To the editors

It is well known that adherence to even written instructions for the use of adrenaline autoinjectors (AAI) in case of anaphylaxis is bad [1]. Most patients do not always carry their AAI with them [2]. In addition, the patients who do carry their AAI do not necessarily use it if needed and the re-prescription rate is low [3].

At our Asthma and Allergy Centre, we instituted a reminder system system from 2013 until 2017 sending reminders about the expiry date in letter form to all 49 adult patients, 12 month after the first AAI prescription. The letter indicated that we would like to renew a prescription upon presentation in our office or we would even send the prescription via mail if they simply asked for this. Only eight of 49 (16%) patients did so. Some patients answered to our letters and explained why they did not want a new prescription. Some were afraid of injections or side effects or unintentional injuries; others did not see any necessity [4]. All patients in our office do get an anaphylaxis passport with detailed explanations of how to use an emergency kit containing AAI, antihistamine, cortisone and a metered salbutamol dose inhaler. All patients received AAI device training and a belt pouch to always have the emergency kit at hand. All patients have had at least a 20 min instruction on how to use the AAI upon the first prescription and have been able to demonstrate competence in its use at the time of first prescription.

Although it is possible that other doctors may have made follow-up prescriptions, it seems to be that the overall adherence to AAIs is low. We have to find new ways to cope with the low adherence or we have to question the need for AAIs. Our patients do not ask actively for AAIs, they are not wanted and our patients do not use them. The recommendation to repeat the instruction at every follow-up visit fails because patients do not show up [5]. Guidelines that cannot be followed should be reconsidered, instead of lamenting the poor adherence [6]. Rapid soluble antihistamines and oral cortisone tablets can easily be carried around and are more practicable than an AAI. Is less more?

Clinicians who see the most severe cases write guidelines on anaphylaxis. They probably overestimate the severity in general, as outpatients may be different and not all anaphylactic reactions are severe cases and need an AAI. How does a pneumologist trained in emergency medicine regard an asthma attack after an allergy immunotherapy injection compared with a dermatologist? Not all anaphylactic reactions are life threatening. There has never been a DBPC-RCT („Double blind placebo controlled – randomised controlled trial“) for AAIs nor will there be. Our patients perform nonblinded trials: $N=1$ every day. Are they right?

There is also a need to discuss for which patients the prescription of an AAI is imperative. The international guidelines are not very helpful, since they do not give clear instructions in which cases an injector should be prescribed. It is obvious that the most injectors will never be used and it has been demonstrated that patients frequently cannot apply the device correctly.

Conflict of interest N.K. Mülleneisen declares that he has no competing interests.

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