

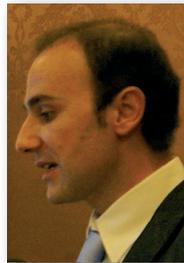
9th International Patient/Physician Conference on Oral Anticoagulation Therapy, Berlin, Oct 9th-12th, 2014

Adherence to anticoagulation – prescribing treatment is only the first step!

The pillars of successful therapy

For a drug to work:

- it should be taken;
- it should be taken regularly;
- it should be taken for as long as the therapy is supposed to last.



Gentian Denas, MD

Inadequate persistence:

- Inadequate communication;
- asymptomatic condition;
- medication costs;
- polypharmacy;
- complex dosing;
- side effects.

Persistence in numbers:

- Within the first year, 22% – 33% of patients newly started on warfarin for AF discontinue therapy.
- Patients with *lower thrombotic risk* (i.e. CHADS₂=2) were more likely to *discontinue therapy*.
- Patients with *poorer INR control* were more likely to *discontinue therapy*.

Fang MC et al., *Circ Cardiovasc Qual Outcomes*. 2010;3(6):624-631.

Go AS et al., *Circulation* 2009;119(10):1363-1369.

Mant J et al., *Lancet* 2007;370(9586):493-503

Risk of low persistence:

- Almost 30% of patients were not actively taking warfarin at the time of their stroke.
- About 50% of patients with AF who had stroke had inadequate anticoagulation (INR <1,5).
- OAT patients maintain a therapeutic INR level only about 50% of the time.

Arch Intern Med. 1994;154(13):1449-1457.

Matchar DB et al., *Am J Med*.2002;113(1):42-51

What is adherence?

The active, voluntary, and collaborative involvement of the patient in a mutually acceptable course of behavior to produce a therapeutic result.

Good adherence is intake of at least 80% of the prescribed dose.

„Adherence has been interchangeably used with compliance but it is a broader concept. While compliance is somewhat related only to the patient once the medication has been prescribed, adherence involves doctors that should take an active part together with the patient in achieving it!“, *Gentian Denas*.

Measuring adherence

There is currently no general consensus as to the best measure to use to define adherence

Direct:

- directly observed therapy, measurement of the level of medicine or metabolite in blood, and measurement of the biological marker in blood.

Indirect:

- self-report, pill counts, and pharmacy refills, electronic pharmacy data.



Osterberg et al., *N Engl J Med*. 2005;353:487-489



Participants of the ISMAAP-Conference in Berlin (from left to right):

A. Färber (Switzerland); H. Rott, MD (Germany); A. Jacobson, MD (USA); N. Leroul (Denmark); B. Dieplinger, MD (Austria); A. Bianco (Italy); L. Bekmann (Switzerland); N. Merlin (Italy); A.F.P. Ehlers, MD (Germany); M. Nagler, MD (Switzerland); H. Koertke, MD (Germany); A. Gobillard (France); H.W. de Bruijn (Netherlands); D. Kirsner (France); C. Bal dit Sollier, MD (France); P. Mandrup (Denmark); C. Schaefer (Germany); L. Drouet, MD (France); A. Krajewski (Belgium); U. Walchshofer (Austria); G. Denas, MD (Italy); A. Oldenburg (Austria); R. van't Land, MD (Netherlands); W. Wuillemin, MD (Switzerland); C.N. de Graaff (Netherlands); A. Wisman (Netherlands).

Risk factors for poor adherence to warfarin therapy

The failure to initiate warfarin therapy is responsible for a large percentage of underuse.

- Inconvenience of taking the medication;
- Inconvenience of frequent blood monitoring and clinic visits;
- Perceived efficacy of the medication in preventing adverse outcomes (ie, stroke);
- Anxiety about potential drug-drug interactions;
- Extend of shared decision making between the physician and patient when starting the medication;
- Quality of information given to patients by physicians;
- Impact of information on physical activities;
- Dietary and alcohol restrictions.

(Keenland et al., Patient Prefer Adherence. 2010; 4: 51-60.)

Factors associated with drug adherence

Positive:

- Acceptance of illness;
- Trust in the therapist;
- Belief in the therapy;
- Higher level of education;
- Stability of family background.

Negative:

- Male gender;
- Young age;
- Active employment;
- Homelessness.

Cognitive/neurological/psychiatric disorder

- Susceptibility to adverse side effects;
- Low TTR;
- Patient's lack of knowledge surrounding their treatment and condition;
- High pill burden.

(Modified from Ewen et al., Clin Res Cardiol (2014) 103:173-182)

Strategies to improve persistence & adherence – in Italy

<u>Strategy</u>	<u>Impact</u>
<input type="checkbox"/> Prioritize patient preference to tailor medication effectively	◆◆◆◆
<input type="checkbox"/> Healthcare personnel convincement on thromboprophylaxis	◆◆◆◆
<input type="checkbox"/> Patient convincement on thromboprophylaxis	◆◆◆
<input type="checkbox"/> Patient education about anticoagulation therapy	◆◆◆
<input type="checkbox"/> Finding the most appropriate delivery mode and frequency for information	◆◆◆
<input type="checkbox"/> Patient follow up from GP and AC physician	◆◆◆
<input type="checkbox"/> Pharmacy logs (refill frequency)	◆
<input type="checkbox"/> Patient logbook or questionnaire	◆
<input type="checkbox"/> Self-monitoring	◆◆◆

(Modified from: Cardiology Clinic, Padua University Hospital)

Conclusions

- Non-adherence to anticoagulation is a common phenomenon and is associated with adverse clinical outcomes.
- As the first step toward improving adherence, there needs to be a broader recognition and understanding of the problem.
- The determinants of adherence are complex and include a number of interacting factors.
- Awareness of these factors and development of strategies to face them represent important ways to improve adherence and persistence.
- Simple strategies in daily practice seem to work best.

Gentian Denas, MD, Cardiology Clinic, Padua University Hospital, Padua/Italy

International Self-Monitoring Association of oral Anticoagulated Patients (ISMAAP), Geneva/Switzerland, www.ismaap.org, E-Mail: c.schaefer@ismaap.org

Websites of ISMAAP-Members:

Austria: inr-austria.at
 Belgium: girtac.be
 Denmark: akpatient.dk
 France: avkcontrol.com
 Germany: die-herzklappe.de
 Italy: aipapadova.com
 Spain: www.anticoagulados.info
 Switzerland: www.inrswiss.ch
 United Kingdom: www.anticoagulationeurope.org
 The Netherlands: www.stizan.nl

