Prudence in Approaching Valvular Heart Disease

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Recently, the article 29 of the 1988 Brazilian Code of Medical Ethics gained the primacy over the first article in the 2010 issue[1] for being, historically, the most infringed. Imprudence and negligence are the attitudes typified by it. The highlight brings to our minds the integration between choices and human values, knowledge and wisdom, motivation and expertise, dialogue and documentation, state of art over illness and the patient's particularities as an essence of the virtuous clinical practice.

Considering that acting ethically includes deliberating with prudence - one of the essential virtues in the history of the human race -, the search of therapeutic reasons for the wellbeing of the patient in question employs an argumentation process over success probabilities and uncertainties; experience modulates amplitudes and subtleties employed in each appreciation of the benefit conceptually applicable to satisfy the clinical need versus adversity risk magnitude.

If the mechanicist process for obtaining the best scientific evidence uses the reductionism as a concept in research with voluntary subjects (exclusions in function of the objective)[2], excellence in care requires also thinking about the elimination of therapeutic methods in view of better clinical evidences obtained from the patient. Consequently, one of the requirements - medical information - is fulfilled for the utilization of the so-called Personalized Medicine, which invokes the most individualized treatment possible (the other requirements include genetic, genomic and environmental data)[3,4].

Thus, being at the bedside is dealing with the maximum possible limit of prudence (since there is no such thing as zero iatrogenesis), assuring that what is "prudently" selected is to be done and what is "prudently" put aside is not to be done, according to ethics. In other words, the wide range opened by technoscientific options will be summoned in real life by classifying approaches as indicated ("prudent"), not indicated ("borderline") and contraindicated ("imprudent"). A method can be included in the three categories above in distinct moments of the natural history of the same patient.

Keywords

Ethics, Medical; Heart Valve Diseases / history; Heart Valve Prosthesis.

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According to this point of view, thinking about prudence precedes the worries about zeal (as opposed to negligence); by the way, it is the order followed on the first article of the Brazilian Federal council of Medicine, which enunciates what is denied to the Brazilian physicians. Subordination of skills to prudence increases the social value of Medicine. Prudence violating behaviors are unthinkable in face of the expansion of adversities to patients, which involves the multiplication of illness causes, diagnostic methods and treatment modalities[5].

Indeed, complexity of both the bioscientific and the socioeconomic aspects associated to the medical act leads to permanent challenge to the comprehensiveness, on a case basis, of therapeutic means application which is hypothesized in scientific communications. Thus, exercising prudence on anticipating the execution of a certain procedure (drug prescription, surgery) enforces the physician's critical sense on the best perspective for his patient's future. Even though it is not possible to ensure the results of therapeutic approach strategies, the odds of achieving the expected good results increase by adjusting the acknowledgement of quantitative and qualitative limits to patient's clinical particularities, specially the comorbidity impact. As an illustration of the commitment of prudence with the avoidance of clinical adversities in the future, it may be necessary to change prescriptions by contraindicating drugs or modifying their dosage after prudent evaluation of hepatic and renal functions.

Once the benefit/non harm rate related to the case is known, our thoughts turn to the present dimension, that is, the execution, which implies zeal and not negligence. Diagrams, such as the algorithms that organize pathways according to pre-established circumstances, give us an idea of the prudence-zeal sequence. One example of this is the so-called "watchful waiting", a prudent attitude in face of a combination of circumstances that is reassuring (as much as possible) about the prognosis, but that, when transformed in a procedure indication, makes zeal appear as it is performed in a convenient time limit.

We can imply that the daily use of routines bypasses prudence, since prudence is already included in the recommendation and makes the principle of not overlooking what must be done predominate. The understanding of "expected" adverse outcomes must be taken care of, taking into account the difference between the ones that can be eliminated (for example, prescribing an alternative to enalapril if the patient develops cough) and the ones that cannot be avoided but are controllable (increased serum creatinine levels due to high diuretic dose use in

severe heart failure). Good medical reasoning *pari passu* with anamnesis, physical examination and complementary testing is what gives excellence to prudence, a real, continuous and human exercise.

Considering the therapeutic resolution on valvular heart disease, reasoning by the cardiologist ensures that the approach includes prudence - the final step of the RESOLVA routine[6] - and allows it to progress to the legitimate approach status, a doctor-patient relationship in agreement to medical ethics.

Prudence, applied to someone who carries an indelible disease, such as valvular heart disease, is a wise counselor on fidelity to the future, putting in the first place, as a precaution, the possible outcomes after therapeutic application based on knowledge of the causes and effects. It is a mainstay of the construction of the inevitable risk-desirable benefit binomial in decision making in valvular heart disease.

The first stage of the natural history of the rheumatic model in valvular heart disease is peculiar within cardiology, due to the remarkable maintenance of I/II functional class despite morphologic evolution of valvular damage. At this stage, watchful waiting, simply profiting from the cardiac remodeling clinical effect, is a prudent attitude to be taken by the cardiologist who understands that it is not necessary to add drug therapy to the very competent "natural treatment" that is happening. So, prudence receives credit for privileging the absence of clinical manifestations over the advanced morphologic damage observed to valvular disease during a number of years. Waiting to perform hemodynamic correction of the lesions until the available methods are considered safe is to conjugate prudence to the reality of the prognosis on the duration and quality of life. According to this line of thinking, the prudent procedure hierarchy for the oligosymptomatic patient with valvulopathy should concentrate on the suppression of etiopathogenic aggravation by antibiotic prophylaxis directed to active rheumatic disease (when needed) and infectious endocarditis.

Contemporary knowledge on valvular heart disease was forged on a powerful sense of prudence. An emblematic example is the creation of the ten commandments for the ideal valvular prosthesis, a collection of the (still unresolved) concerns of the pioneer surgeon Dwight Emary Harken (1910-1993) et al[7]. Its conversion to a classic of Cardiology literature, where it became an authentic representative of the connection between generations of physicians based on experiences and ideas, must be credited to its elaboration based on prudence, on the purest Hippocratic sense.

Guidelines have gathered approaches based on a critical span of the scientific literature on valvular heart disease, labeled according to its modalities, effects and probabilities. These systematizations should be periodically and prudently subject to revision, both by excluding data and opinions published in various journals if considered inappropriate to mention and understanding the need of explicitly listing inappropriate choices, and it could not be otherwise. Nevertheless, an infinite universe of nosologic combinations is not enough.

Prudence's hierarchy is straightforward in the formulation of the seven essential questions to valve heart disease carrier aiming to the intervention highlighted in the 2012 European Society of Cardiology and the European Association for Cardiothoracic Surgery guidelines[8], namely: a) is the valvulopathy severe?; b) is the patient symptomatic?; c) are the symptoms related to the valvulopathy?; d) what is the patient's life expectancy and quality of life?; e) do the benefits expected from the intervention (as opposed to natural history) overcome the risks?; f) what are the patient's preferences?; and g) are there sufficient local resources for implementing the plan? Regarding this last item, and taking into account that prudence includes considering human resource's dexterity uncertain, the evaluation of more than 50,000 mitral valve procedures concluded that the case volume of a surgeon does not depend on hospital's results and suggested the identifying the processes that lead the surgeons that perform more surgeries to better results is prudent[9]. On the other side, the mitral valve plastic surgery/mitral prosthesis implant rate increases as the mitral valve surgery volume increases in a certain hospital[10].

The intrinsic prudent character of the non-recommendation reveals itself in the effect III dimension (inutility, inefficacy and even damage) of the guidelines organized by the Brazilian Society of Cardiology; it expresses the reproach on the association of moral and prudence, though not devoid of doubts, for associating to the likelihood of a C certainty level. Prudent non-recommendation carries a deontological sense, that is, ignoring the "official" recommendation implies in infringement of our ethics code, inattention to evidence of an unfavorable risk/benefit rate in attendance to needs of patients with valvular heart disease. Additionally, legal appraisal of disobedience to guidelines is opposed to the documented conformity to the patient's best interest.

As the cardiologist is involved in effect dimensions I, IIa and IIb, the binomial prudence-moral acts through the commitment to a integral view of the valvulopathy patient's morbidities. While classes I and IIa arise from prudent recommendation provided there is no individual obstacle, class IIb presents the greater degree of conflict among all evidences, and, as inutility and inefficacy cannot be discarded, implicate in a smaller "official" prudence attestation in use.

Since prudence is the raw material of the cardiologist's intellect, to see the patient behind valvular heart disease, in the way to Recommended Approach - Legitimate Approach[5] brings the professional responsibility sense together with the ontological component of ethics, the one who emerges from the physician and is implicit in the Hippocratic oath.

Concluding, the approach to valvular heart disease is a cautious exercise pro-prognosis and against therapeutic adversity in a state-of-the art context, demanding intimacy with the best scientific evidence and an individualized look, thus avoiding to reduce the valvulopathy patient to an impersonal diagnosis/treatment in a table of contents.

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