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EDITORIAL: YOU BET YOUR LIFE - MEDICATION RISK TAKING BY GASTROPARESIS PATIENTS IN A HYPOTHETICAL EXERCISE

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Two thirds of gastroparesis patients rate their health as fair to poor or are dissatisfied with available treatments, reflecting impaired quality of life (QOL) (1). Generic surveys (e.g. SF-36) quantify impact of health status on physical and mental activities and permit QOL comparisons with other disorders (2). Disease-specific questionnaires (e.g. PAGI-QOL) query effects of food on functioning possibly offering more sensitive detection of reduced QOL (2).

Such observations do not describe sacrifices patients make for better health. Risk taking is another component of QOL. Clinicians already know gastroparesis patients take risks when choosing therapies with possible irreversible or fatal consequences (e.g. metoclopramide, domperidone, gastric surgeries). Navas *et al*. employed standard gamble methodology to quantify gastroparesis patients' acceptance of medication risks (3). One hundred three patients with moderate to severe symptoms stated they would accept 13.4% risks of immediate death to ensure cure of gastroparesis with one dose of a hypothetical drug. Those with severe symptoms or psychosocial dysfunction were willing to assume greater risks. Nearly half expressed hopelessness their symptoms would ever resolve.

The standard gamble was described in 1953 to define the risk of death a person would accept to achieve perfect health when offered curative therapy (4). Standard gambles define a value called utility that ranges from 0 (dead) to 1.0 (perfect health) (Figure). Conditions with bleak outcomes have lower utilities while chronic illnesses with little mortality risk score higher. In this study, willingness to accept 13.4% mortality risks translates into a utility of 0.866 (1 minus 0.134). Functional dyspepsia patients assume similar 12.7% possibilities of death—an expected finding given overlap of functional dyspepsia with gastroparesis and the lack of impact of gastric emptying delays on QOL in diabetics with dyspeptic symptoms (5, 6). However, IBS patients accept 1% mortality risks for immediate cure suggesting lesser QOL impairments versus gastroparesis (7).

Quantitative findings of standard gambles should not be overinterpreted. Binary standard gamble choices rarely mimic standard management options offered in clinical practice (8). No medication cures gastroparesis in one dose and mortality from gastroparesis unrelated to comorbid illness is rare. Thus, absolute risk percentages based on artificial premises of this standard gamble might not reflect accurate risk considerations when traditional treatments are advocated. Study design factors known to influence standard gamble utility include changing

risk wording from death to survival and modifying ordering of the survey mortality probabilities from a sequential profile as in this study to a "ping pong" pattern where risks of death from 0 to 100% are ordered randomly (9, 10).

These limitations do not diminish the importance of this study or conclusions of the willingness of gastroparesis patients to consider risks when making treatment decisions. These findings complement the emerging literature on QOL deficits in gastroparesis. One hopes that future studies will contrast standard gamble findings concurrently with other functional and motility disorders to clarify the extra illness burden assumed in gastroparesis and correlate standard gamble utilities with other QOL surveys to inform caregivers when considering treatments for refractory symptoms.

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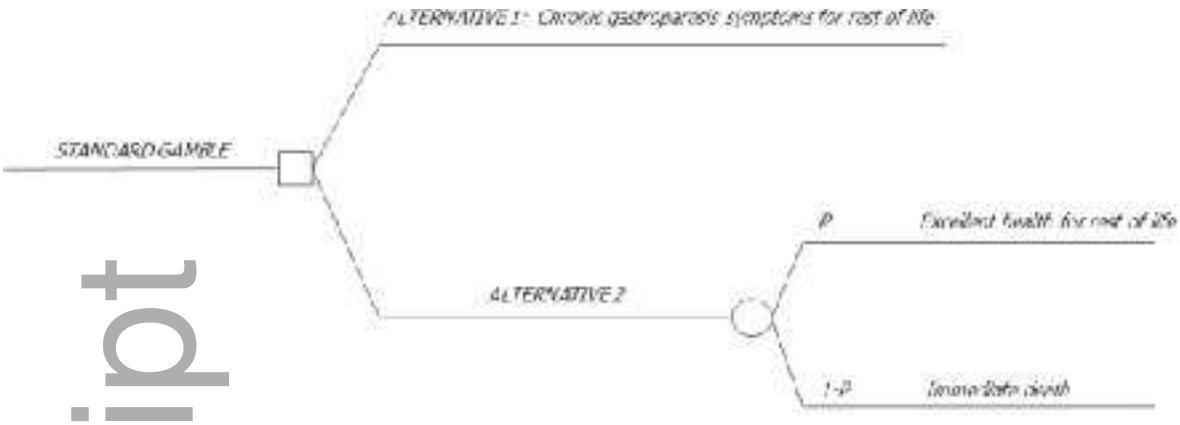
FIGURE LEGEND

Figure: The standard gamble for the study (reference 3) in gastroparesis is shown. A patient is offered a choice between alternative 1 (living the rest of his/her life with chronic stable gastroparesis symptoms) or alternative 2 (accepting a risk of "gambling" between excellent health for the rest of his/her life versus immediate death). The probability of excellent health (P) is varied until the patient is indifferent between the chronic gastroparesis health state and the gamble. Figure adapted from reference 2.



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