

## SUBJECTIVE GLOBAL ASSESSMENT (SGA)

### A. History

#### 1. Weight Change

Maximum weight \_\_\_\_\_ Wt 1 year ago \_\_\_\_\_ Wt 6months ago \_\_\_\_\_ Current Wt \_\_\_\_\_

Overall loss in past 6 months: amount = # \_\_\_\_\_ lbs; % loss = \_\_\_\_\_.

Change in past 2 weeks: \_\_\_\_\_ increase,  
\_\_\_\_\_ no change,  
\_\_\_\_\_ decrease.

Other history: (Change in clothing size, loose fitting clothes...)

A=No significant change; B=5-10% weight loss; C= 10% or more sustained weight loss

#### 2. Dietary intake change (relative to normal)

(Have eating patterns changed over last weeks or months? Has amount of food eaten changed? Are certain foods they used to eat that they no longer eat? What happens if they try to eat more? How does typical breakfast, lunch, dinner compare with six to twelve months ago?)

A=No significant change; B=poor but improving or borderline but declining; C=starvation, unable to eat

#### 3. Gastrointestinal symptoms (that persisted for > 2 weeks)

\_\_\_ none (A), \_\_\_ Some symptoms (B) (nausea, vomiting, diarrhea, anorexia. \_\_\_ Many symptoms (C)

#### 4. Functional capacity

\_\_\_ No dysfunction (e.g., full capacity),(A)

\_\_\_ Dysfunction : mild (B); \_\_\_ Severe (C) \_\_\_\_\_ duration = # \_\_\_\_\_ weeks.

#### 5. Disease and its relation to nutritional requirements

Metabolic demand (stress): \_\_\_\_\_ no stress (A), \_\_\_\_\_ low-moderate stress (B),

\_\_\_\_\_ high stress (C)

### B. Physical (for each trait specify: A = normal, B = mild-moderate, C = severe).

# \_\_\_\_\_ loss of subcutaneous fat (triceps, chest)

# \_\_\_\_\_ muscle wasting (quadriceps, deltoids)

# \_\_\_\_\_ ankle edema

# \_\_\_\_\_ sacral edema

# \_\_\_\_\_ ascites

### C. SGA rating (select one)

\_\_\_\_\_ A = Well nourished

\_\_\_\_\_ B = Moderately (or suspected of being) malnourished

\_\_\_\_\_ C = Severely malnourished

### Water Test

Offer alert patient 70 ml of water to drink.

Observe if able to swallow without choking, coughing or spitting out the water (if positive consider diagnosis of oropharyngeal dysphagia)

Reproduced from: *Subjective Global Assessment* Covinsky KE, Martin GE, Beyth RJ, et al. The relationship between clinical assessments of nutritional status and adverse outcomes in older hospitalized medical patients. J Am Geriatr Soc 1999; 47:532-538.

## APPENDIX

# Assessing the Nutritional Status of Dialysis Patients Using Subjective Global Assessment (SGA)

## INTRODUCTION

Because nutritional assessment is difficult, a new technique called Subjective Global Assessment (SGA) was developed. Its ratings have been found to be highly predictive of outcome.<sup>1,2,3</sup> The procedure is easy to learn and simple to implement. SGA requires no additional laboratory testing or capital outlay. In addition, SGA has been found to correlate strongly with other subjective and objective measures of nutrition.

Although originally used to categorize surgical patients, this nutritional classification system has been shown to be a reliable nutritional assessment tool for dialysis patients.<sup>4,5</sup> Fenton<sup>6</sup> found that survival of patients classified as malnourished by SGA was significantly lower than patients classified as nourished, although he did not perform analyses to establish nutritional status as an independent risk factor.

SGA classifies the patient as:

- A. Well-nourished
- B. Mildly malnourished or suspected of malnutrition
- C. Severely malnourished

Clinicians place the patient into one of these categories based upon their subjective rating of the patient in two broad areas: 1. Medical History, 2. Physical Examination.

In general, 60% of the clinician's rating of the patient is based on the results of the medical history, and 40% on the physical examination (see SGA evaluation form in figure 1).

## Medical History Section

The first SGA component, the medical history, involves asking questions and evaluating the patient's answers about the following four parameters:

- Weight change
- Dietary intake
- Gastrointestinal symptoms
- Functional impairment

The patient is rated as either nourished, mildly, moderately malnourished, or severely malnourished for each of the four parameters.

## Physical Examination Section

Physical evidence of malnutrition is rated differently. There are four categories to select from: normal nutrition, mild malnutrition, moderate malnutrition, or severe malnutrition.

Physical signs to examine include:

- Loss of subcutaneous fat
- Muscle wasting
- Edema
- Ascites (in hemodialysis patients only)

There are several body locations to examine for each parameter.

## **SGA SCORING GUIDELINES**

The clinician rates each medical history and physical examination parameter as either an A, B, or C on the SGA Scoring Sheet. On the basis of all of these parameters' ratings, the clinical observer assigns an overall SGA classification which corresponds to his or her subjective opinion of the patient's nutritional status.

SGA is not a numerical scoring system. Therefore it is inappropriate just to add the number of A, B, and C ratings to arrive at the overall SGA classification. The clinician should examine the form to obtain a general feel for the patient's status. If there seem to be more checks on the right-hand side of the form (more B and C ratings), the patient is more likely to be malnourished. If the ratings seem to be on the left-hand side, the patient is likely to be nourished.

The severely malnourished (C) rating is given whenever a patient has physical signs of malnutrition such as, severe loss of subcutaneous fat, severe muscle wasting, or edema, in the presence of a medical history suggestive of risk, such as continuing weight loss with a net loss of 10% or more, or a decline in dietary intake. GI symptoms and functional impairments usually exist in these patients. Severely malnourished patients will rank in the moderate to severe category in most sections of the SGA form.

When weight loss is 5-10% with no subsequent gain, in conjunction with mild subcutaneous fat or muscle loss and a reduction in dietary intake, the patient is assigned the mildly/moderately malnourished (B) rating. These patients may or may not exhibit functional impairments or GI symptoms. The B rating is expected to be the most ambiguous of all the SGA classifications. These patients may have a ranking in all three categories. In general, if the severely malnourished (C), or well-nourished (A) rating is not clearly indicated, assign the patient to the moderately malnourished classification.

If the patient has no physical signs of malnutrition, no significant weight loss, no dietary difficulties, no nutritionally related functional impairments, or no GI symptoms which might predispose to malnutrition, the patient should be assigned to the well-nourished (A) category.

If the patient has recently gained weight, and other indicators, such as appetite, show improvement, the patient may be assigned the A rating, despite previous loss of fat and muscle which may still be physically apparent. On the other hand, obese patients can be moderately or severely malnourished based upon their poor medical history and signs of muscle loss. Even patients with a normal appearance could be classified as mildly or moderately malnourished because of a poor medical history.

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# Subjective Global Assessment Scoring Sheet

Patient Name: \_\_\_\_\_ Patient ID: \_\_\_\_\_ Date: \_\_\_\_\_

## Part 1: Medical History

### SGA Score

### 1. Weight Change

- A. Overall change in past 6 months: \_\_\_\_\_ kgs.
- B. Percent change: \_\_\_\_\_ gain - \_\_\_\_\_  $<$  5% loss  
                                      \_\_\_\_\_ 5-10% loss  
                                      \_\_\_\_\_  $>$  10% loss
- C. Change in past 2 weeks: \_\_\_\_\_ increase  
  \_\_\_\_\_ no change  
  \_\_\_\_\_ decrease

### 2. Dietary Intake

- A. Overall change: \_\_\_\_\_ no change  
                                      \_\_\_\_\_ change
- B. Duration: \_\_\_\_\_ weeks
- C. Type of change:  
      \_\_\_\_\_ suboptimal solid diet       \_\_\_\_\_ full liquid diet  
      \_\_\_\_\_ hypocaloric liquid         \_\_\_\_\_ starvation

### 3. Gastrointestinal Symptoms (persisting for $>$ 2 weeks)

\_\_\_\_\_ none   \_\_\_\_\_ nausea   \_\_\_\_\_ vomiting   \_\_\_\_\_ diarrhea   \_\_\_\_\_ anorexia

### 4. Functional Impairment (nutritionally related)

- A. Overall impairment:  
\_\_\_\_\_ none  
\_\_\_\_\_ moderate  
\_\_\_\_\_ severe
- B. Change in past 2 weeks:  
\_\_\_\_\_ improved  
\_\_\_\_\_ no change  
\_\_\_\_\_ regressed

| A | B | C |
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## Part 2: Physical Examination

5. Evidence of:  
Loss of subcutaneous fat  
Muscle wasting  
Edema  
Ascites (hemo only)

| SGA Score |      |          |        |
|-----------|------|----------|--------|
| Normal    | Mild | Moderate | Severe |
|           |      |          |        |
|           |      |          |        |
|           |      |          |        |
|           |      |          |        |

### Part 3: SGA Rating (check one)

- Well-Nourished                       Mildly-Moderately Malnourished                       Severely Malnourished

## SUBJECTIVE GLOBAL ASSESSMENT (SGA)

Subject Name: \_\_\_\_\_  
History Number \_\_\_\_\_  
Study ID \_\_\_\_\_  
Date \_\_\_\_\_

### A. History

#### 1. Weight Change

Maximum weight \_\_\_\_\_ Wt 1 year ago \_\_\_\_\_ Wt 6 months ago \_\_\_\_\_ Current Wt \_\_\_\_\_

Overall loss in past 6 months: amount = # \_\_\_\_\_ lbs; % loss = \_\_\_\_\_.

Change in past 2 weeks: \_\_\_\_\_ increase,  
\_\_\_\_\_ no change,  
\_\_\_\_\_ decrease.

Other history: (Change in clothing size, loose fitting clothes....)

#### 2. Dietary intake change (relative to normal)

(Have eating patterns changed over last weeks or months? Has amount of food eaten changed? Are certain foods they used to eat that they no longer eat? What happens if they try to eat more? How does typical breakfast, lunch, dinner compare with six to twelve months ago?)

\_\_\_\_\_ No change,  
\_\_\_\_\_ Change \_\_\_\_\_ duration = # \_\_\_\_\_ weeks.  
\_\_\_\_\_ type: \_\_\_\_\_ suboptimal solid diet, \_\_\_\_\_ full liquid  
\_\_\_\_\_ hypocaloric liquids,  
\_\_\_\_\_ starvation.

diet

#### 3. Gastrointestinal symptoms (that persisted for > 2 weeks)

\_\_\_\_\_ none, \_\_\_\_\_ nausea, \_\_\_\_\_ vomiting, \_\_\_\_\_ diarrhea,  
\_\_\_\_\_ anorexia.

#### 4. Functional capacity

\_\_\_\_\_ No dysfunction (e.g., full capacity),  
\_\_\_\_\_ Dysfunction \_\_\_\_\_ duration = # \_\_\_\_\_ weeks.  
\_\_\_\_\_ type: \_\_\_\_\_ working suboptimally,  
\_\_\_\_\_ ambulatory,  
\_\_\_\_\_ bedridden.

#### 5. Disease and its relation to nutritional requirements

Primary diagnosis (specify)

\_\_\_\_\_ Metabolic demand (stress): \_\_\_\_\_ no stress, \_\_\_\_\_ low stress,  
\_\_\_\_\_ moderate stress, \_\_\_\_\_ high stress.

B. Physical (for each trait specify: 0 = normal, 1+ = mild, 2+ = moderate, 3+ = severe).

- # \_\_\_\_\_ loss of subcutaneous fat (triceps, chest)
- # \_\_\_\_\_ muscle wasting (quadriceps, deltoids)
- # \_\_\_\_\_ ankle edema
- # \_\_\_\_\_ sacral edema
- # \_\_\_\_\_ ascites

C. SGA rating (select one)

- \_\_\_\_\_ A = Well nourished
- \_\_\_\_\_ B = Moderately (or suspected of being) malnourished
- \_\_\_\_\_ C = Severely malnourished

History obtained primarily from:

- \_\_\_\_\_ Patient
- \_\_\_\_\_ Surrogate
- \_\_\_\_\_ Chart

Physical obtained primarily from

- \_\_\_\_\_ Patient
- \_\_\_\_\_ Chart