Silymarin (milk thistle) Helps Type 2 Diabetic Patients
By Byron Richards, CCN – March 27, 2012

Healthy liver function is required for the proper storage, release, and overall metabolism of blood sugar. Individuals with compromised liver function often develop type 2 diabetes, often in conjunction with weight gain and the development of fatty liver. A new study* (see below) shows that silymarin can help patients with liver problems who also have type 2 diabetes.

The study showed that five months of silymarin reduced blood sugar levels of 8%. Significant improvements also important measures of liver health (bilirubin was lowered 40%, SGOT was lowered 29%, SGPT was lowered 35%, and ALP was lowered 12%). Such improvement in liver function is rather dramatic, as the general trend in the liver of diabetic patients is one of increased free radical damage and scar tissue formation, tending to lock in the problem of type 2 diabetes.

Any person gaining excess weight around their midsection is likely developing excessive fatty deposits in their liver with consequent impairment of liver function and risk for blood sugar problems. This study shows that silymarin can help guard against the progression of serious liver deterioration, helping to give a person more time to fix their weight and metabolic issues.

http://www.wellnessresources.com/weight/articles/silymarin_helps_type_2_diabetic_patients/

Effect of Silymarin in Diabetes Mellitus Patients with Liver Diseases

Study Title:
Effect of silymarin in diabetes mellitus patients with liver diseases.

Study Abstract:
The liver is involved in the maintenance of homeostasis within the body. Other functions of the liver include protein synthesis, storage and metabolism of fats and carbohydrates, detoxification and excretion of drug and other toxins. [1] Diabetes developed as a complication of cirrhosis is known as hepatogenous diabetes. Around 30-60% of cirrhotic patients suffer from this metabolic disorder. [2] There is a high prevalence of metabolic syndrome, obesity, and type 2 diabetes mellitus with cryptogenic cirrhosis. [3] Several reports have claimed a specific association between hepatitis C virus (HCV) infection and type 2 diabetes, but in most instances patients were a mixture of cases with cirrhosis, hepatitis and diabetes. [4] Silymarin is a hepatoprotective drug obtained from Silibum marium. Silymarin is reported to have different properties like hepatoprotective activity, anti-inflammatory activity, antioxidant activity, and anti-cancer activity. [5] Previous reports of both preclinical and clinical studies revealed that silymarin has got some anti-diabetic potential. [6], [7], [8] Considering all the above reports and keeping the evidences in mind, this study was undertaken with the objective to assess the effect of silymarin in diabetes mellitus patients with hepatic diseases.

The study was conducted on cirrhotic patients with diabetes mellitus admitted to Medical Trust Hospital, Cochin, Kerala, during the period from July 2009 to December 2009. Patients of both gender, aged between 20 and 70 years, were included in this study. Pregnant females and patients with chronic pancreatitis were excluded from the study. Hepatitis B virus and HCV infected patients were also excluded from the study. The study was conducted after obtaining approval from Institutional Ethical Committee. We selected 10 patients with silymarin + insulin therapy and another 10 patients with insulin + (l-ornithine + l-aspartate). The effectiveness was determined by monitoring
the random sugar levels, total bilirubin, serum glutamic oxaloacetic transaminase (SGOT), serum glutamic pyruvic transaminase (SGPT), alkaline phosphatase (ALP), serum albumin before treatment, and after 3 and 5 months of treatment.

Both insulin + silymarin treated group and insulin + (l-ornithine + l-aspartate) treated group showed reduction in random blood sugar level after 3 and 5 months of treatment when compared to before treatment, but no significant reduction was observed between the groups at different times of treatment. The percentage reduction in random blood sugar levels after 5 months of treatment with silymarin was found to be 8.26 ± 5.19% and in those taking l-ornithine + l-aspartate, it was 6.06 ± 3.08%. Our study also revealed that the decrease in the bilirubin, SGOT, SGPT and ALP levels after 5 months of treatment with silymarin were 39.65 ± 22.18%, 29.40 ± 9.28%, 35.56 ± 6.0%, 11.76 ± 8.47%, respectively, whereas with l-ornithine + l-aspartate treatment, the decrease in levels were 8.93 ± 22.46%, 11.38 ± 27.72%, 16.58 ± 10.80%, 13.32 ± 12.98, respectively. Silymarin produced significant reduction in bilirubin (P<0.01) and SGPT (P<0.001) levels after 5 months of treatment when compared to l-ornithine + l-aspartate. The percentage increase in the albumin levels with silymarin treatment was 16.01 ± 15.06% and with l-ornithine + l-aspartate was 25.39 ± 15.16% [Table 1]. The reduction in random blood glucose, SGOT and SGPT level produced by silymarin was consistent with the results of previous authors. [8], [9] The hypoglycemic potential of silymarin may be due its antioxidant activity by reducing insulin resistance. Our study revealed that silymarin has good effect in the restoration of liver function and also established efficacy in controlling blood glucose level in diabetes patients with liver diseases. Silymarin may make a breakthrough as a new approach to protect other organs in addition to liver.

Study Information:


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Full Study:

http://www.jpharmacol.com/article.asp?issn=0976-500X;year=2011;volume=2;issue=4;spage=287;epage=289;aulast=Jose

http://www.wellnessresources.com/studies/effect_of_silymarin_in_diabetes_mellitus_patients_with_liver_diseases